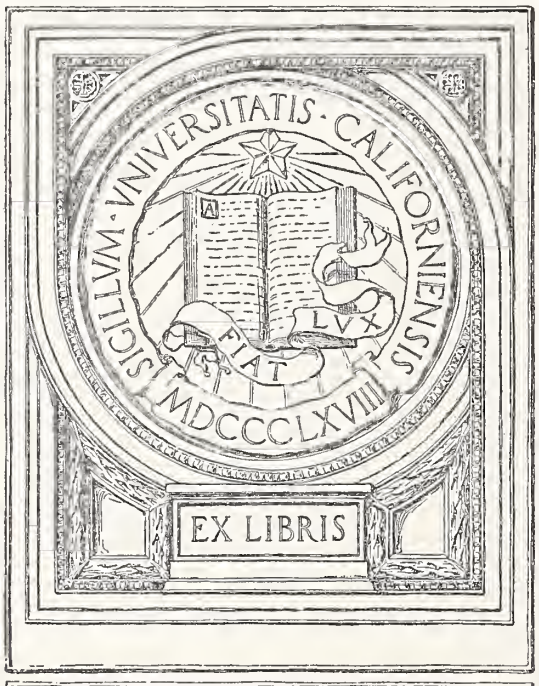
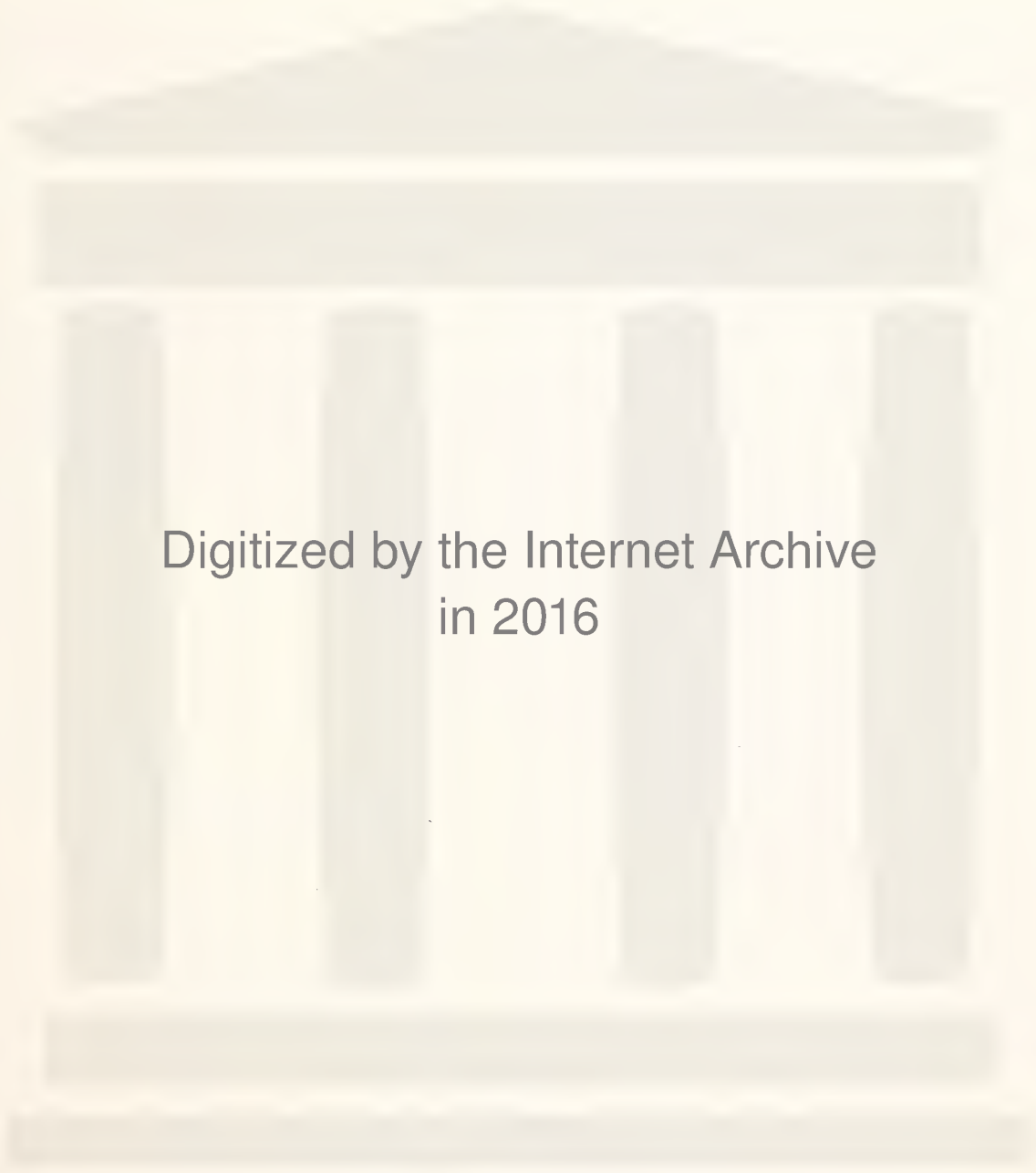
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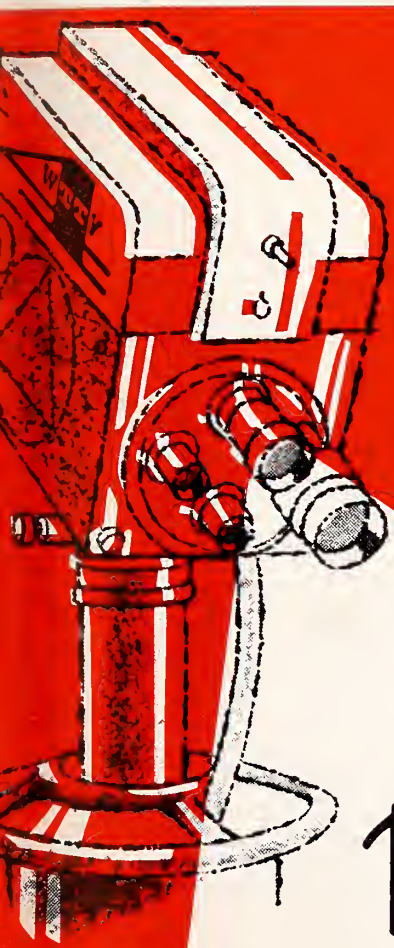



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The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

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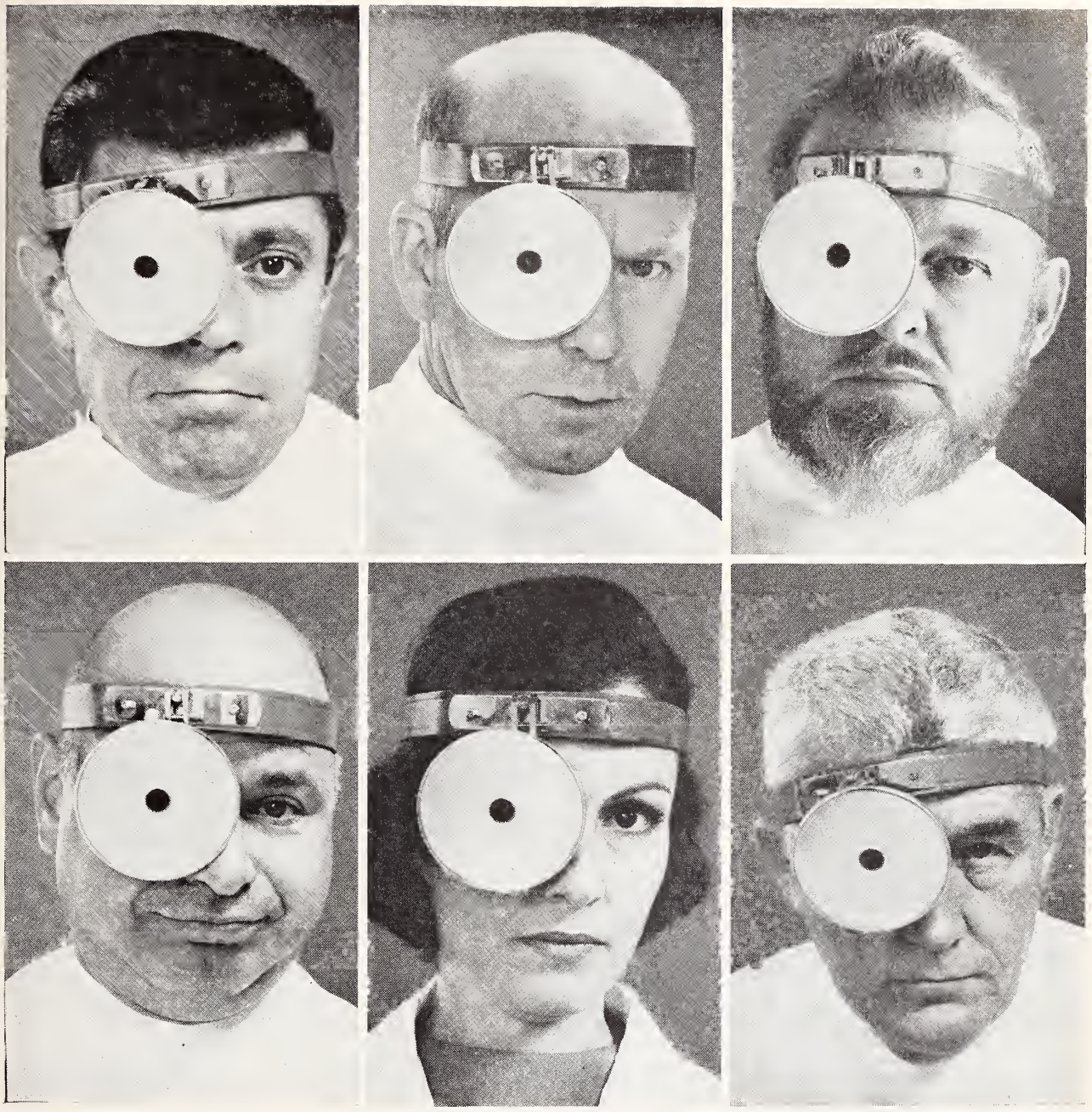
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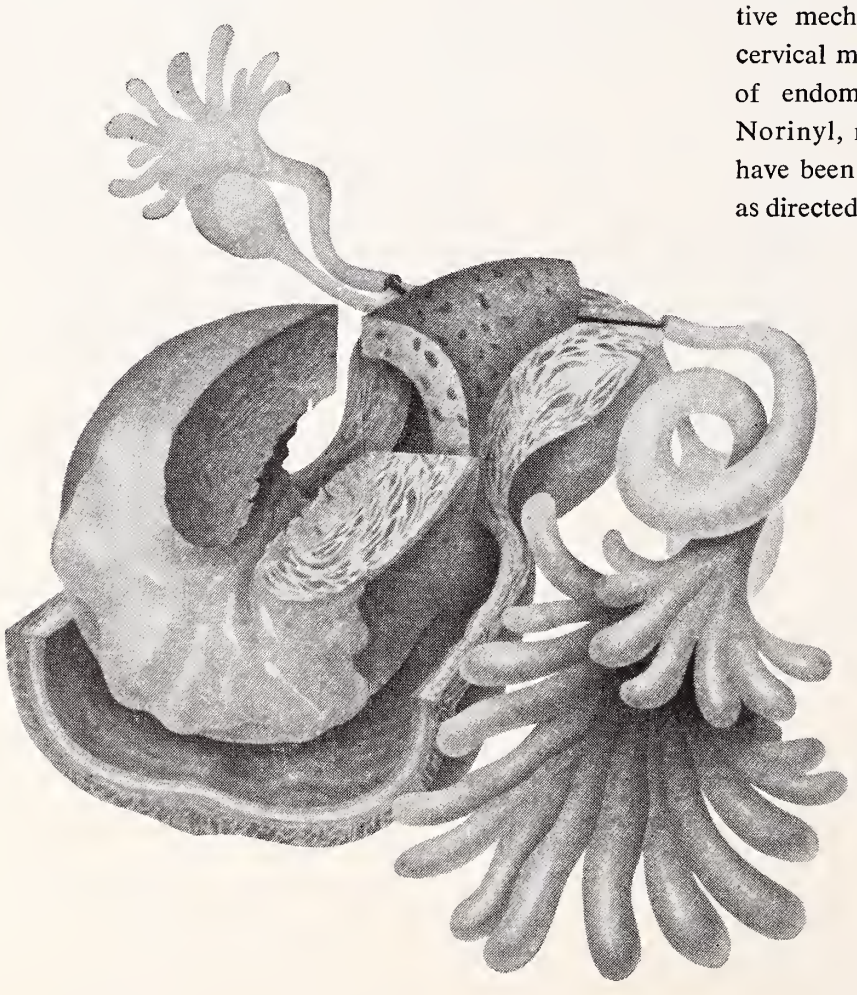
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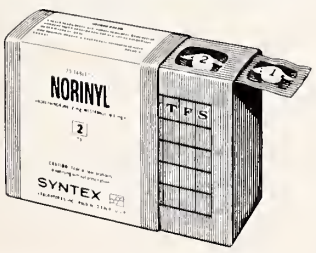
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Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

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References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, O. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. O.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, O. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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1.	Wallace M. Adye, Jr., Evansville	R. E. Weitzel, Princeton	
2.	C. Philip Fox, Washington	J. S. Brown, Carlisle	
3.	Daniel H. Cannon, New Albany	Elmer L. Wallace, New Albany	May 17, 1967
4.	Harold W. Richmond, Columbus	David L. Adler, Columbus	Columbus, 1967
5.	John Ellett, Jr., Coatesville	Richard Veach, Bainbridge	Greencastle, May 17, 1967
6.	J. J. Farrell, Jr., Greenfield	Stephen D. Smith, Knightstown	
7.	Jay Reese, Martinsville	James H. Gosman, Indianapolis	
8.	Donald E. Spahr, Portland	Joseph F. Vormohr, Portland	Portland, June 7, 1967
9.	Harry T. Stout, Frankfort	Earl K. Williams, Frankfort	May 18, 1967
10.	R. James Bills, Gary	John J. Reed, Hobart	
11.	Joseph Bean, Logansport	Fred Poehler, LaFountain	Logansport, Sept. 13, 1967
12.	Warren L. Niccum, Columbia City	Kenneth F. Isenogle, Fort Wayne	Fort Wayne, May 17, 1967
13.	Gordon Cook, South Bend	John Hildebrand, South Bend	



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the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.) ..... 16.2 mg.
(Warning: may be habit forming)
Aspirin (2½ gr.) .....162.0 mg.
Phenacetin (3 gr.) .....194.0 mg.
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Codeine phosphate.....¼ gr. (No. 2),
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(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

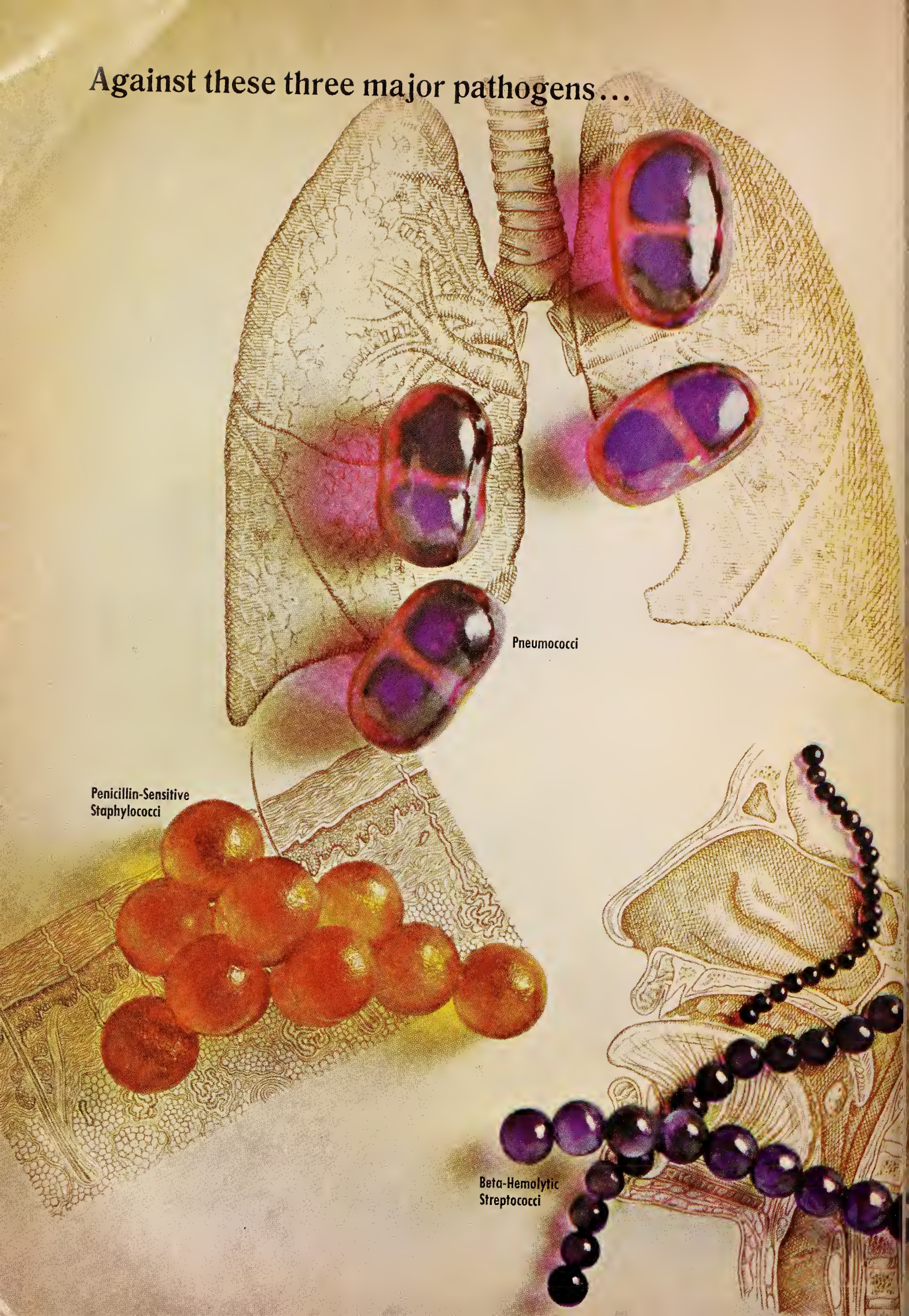
Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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Against these three major pathogens…



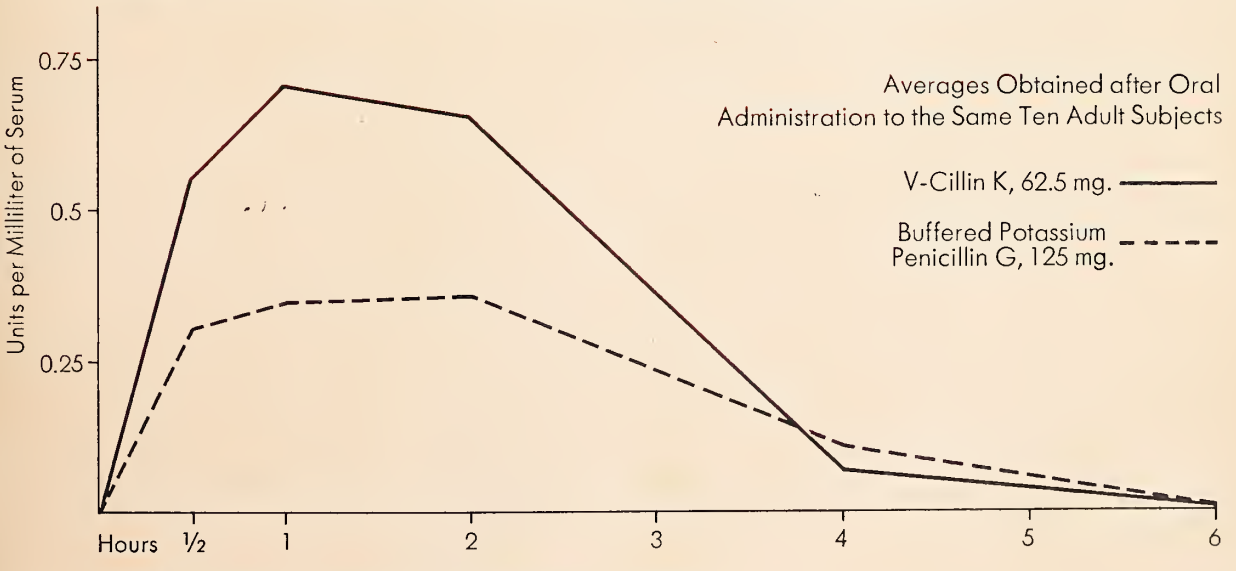
V-Cillin K® provides unexcelled oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269 1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

V-Cillin K® Lilly 7A0157

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are m less common with administration of oral penicillin than with intramus lar forms, skin rash, symptoms resembling those of serum sickness other manifestations of penicillin allergy may occur. When penicilli administered, measures for treating anaphylaxis should be rea available. Those include epinephrine, oxygen, and pressor drugs relief of immediate allergic manifestations as well as antihistami and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the a growth of antibiotic-resistant organisms; in such a case, antibiotic ministration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Ci K, Pediatric, the usual dosage ranges from 125 mg. (200,000 uni three times a day to 500 mg. (800,000 units) every four hours. For fants, the daily dosage may be 50 mg. per Kg. of body weight divic into three doses.

Beta-hemolytic streptococcus infections without associated bac remia may be treated with 200,000 to 400,000 units three times a d Therapy should be continued for a minimum of ten days to prevent velopment of rheumatic fever and/or other serious complications. D age for routine streptococcus prophylaxis in patients with a history rheumatic fever or congenital heart disease may be 200,000 units ar or twice daily. When such patients undergo tonsillectomy, tooth extr tion, or other minor surgery, the prophylactic dose should be 500,0 units every six hours given two days prior to surgery and for two d postoperatively. If oral medication is not feasible on the day of s gery, parenteral therapy should be considered. Mild to moderat severe pneumococcus pneumonia has been treated effectively w 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be giv every six to eight hours in conjunction with indicated surgical pra dures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours three doses may be employed; in females, 500 mg. every four hours six doses are recommended. Patients with a suspected lesion of syph should have a dark-field examination before receiving penicillin a monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,0 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) p 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

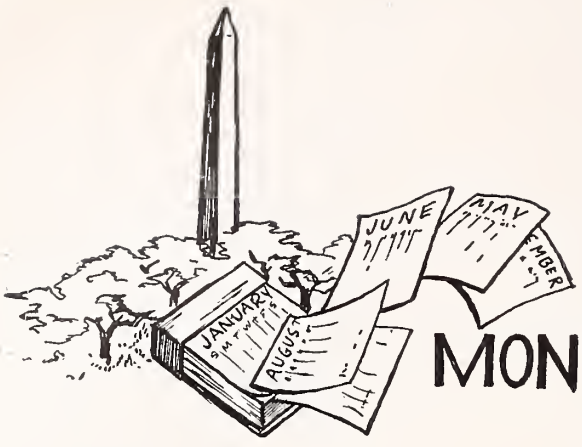
Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

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This summary of what is happening in Washington is prepared by AMA's Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D.C.—The National Institutes of Health is concentrating its efforts in the artificial heart field to support of programs for development of auxiliary heart-pumping devices instead of a complete artificial heart.

THE AUXILIARY device approach includes the programs led by Dr. Michael E. DeBakey of the Baylor University College of Medicine in Houston and Dr. Adrian Kantrowitz, chief of surgical services at Brooklyn's Maimonides Hospital. Other teams working on developing complete artificial hearts will continue their research, but the government will not emphasize their approach.

THE decision to forego for the present a major program to build a complete artificial heart was made by Dr. James A. Shannon, NIH director, after he determined that not enough fundamental information existed on just how the heart operates to make such a project feasible.

DR. KANTROWITZ described the problems involved in designing artificial heart devices in a speech at a meeting of the American Society of Mechanical Engineers in New York.

"THE HEART is not a simple pumping device. It receives thousands of signals from other parts of the body," he said.

"FOR EXAMPLE, when a good-looking blonde walks down the street, your heart speeds up. To make mechanical hearts respond to a blonde will not be so easy. It's better to leave the heart in place to respond to all these signals and make a mechanical pump as an auxiliary device to do most of the work."

DR. DeBAKEY is working toward development of a device that would allow the heart to rest long enough for it to recover its strength and resume its role in the body without assistance. Dr. Kantrowitz is working toward development of an implantable auxiliary device that would permanently aid those whose hearts cannot function adequately alone. Both these approaches and others similar to them are of the type the institute want to support.

"WE WANT to develop both a family of highly efficient short-term devices to tide people over acute heart attacks and also completely implantable heart-assist devices," a NIH spokesman said.

"THEN, after this type of development is worked out and devices have been proven in clinical trials with a high degree of reliability and it looks like total heart replacement is feasible, we will push toward that goal."

Continued

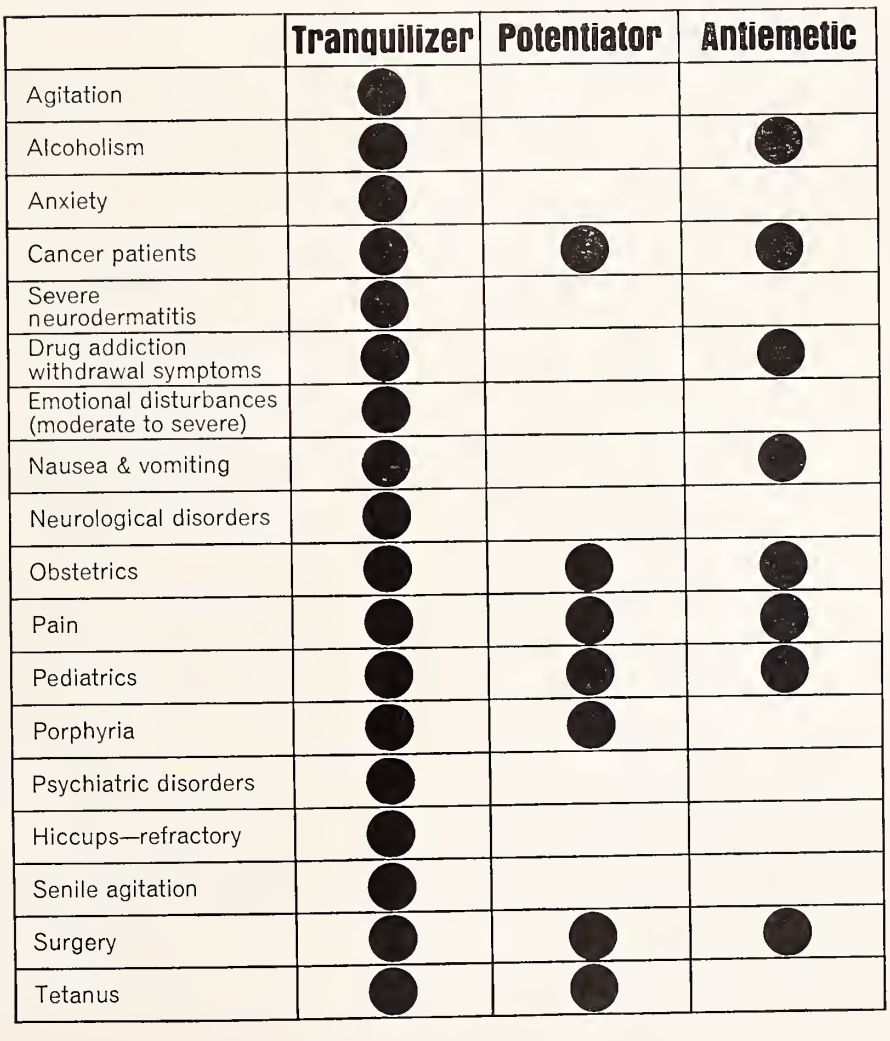
Look how many ways

Thorazine®

brand of

chlorpromazine

can help



'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. *Contraindications:* Comatose states or the presence of large amounts of C.N.S. depressants. *Precautions:* Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. *Side Effects:* Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories SK&F

Continued

DR. KANTROWITZ PRAISED the partnership between physicians and engineers necessary in the artificial heart field but he said efforts must be made to ensure that leadership in the research must remain with the medical profession and not be given to engineers who do not fully understand the medical problems involved.

OBESITY A MAJOR HEALTH PROBLEM

OBESITY has become a major health problem in the United States and a special health hazard for three obesity-prone groups, according to the Public Health Service.

QUOTING a new PHS source book for health professionals, "Obesity and Health," the Service said that the prevalence of obesity in this country is a source of growing medical concern because "fat people are more likely to develop certain diseases and to die at an earlier age than people of normal weight."

PRIME CANDIDATES for the development of obesity and its attendant association with certain serious disorders and possible early death, according to the PHS, are:

1. Children whose relatives are obese: in one study, 73% of 1,000 obese patients had at least one obese parent.
2. Heavily built persons who also have corpulent tendencies: obese individuals usually have a heavier physique than their non-obese counterparts. Large-boned and thickly muscled persons, particularly adolescents, who fit this description should be watched closely.
3. Persons who are becoming less active, more sedentary: food intake does not decrease proportionately with decrease in energy expenditure. As activity decreases, for whatever reason, the risk of developing obesity increases.

THE SERVICE said that while a substantial amount of obesity exists at every age in both sexes, obesity in children and adolescents is a particularly discouraging omen for the future.

"OBESE children and adolescents are a major reservoir for obesity in adult life," the source book said. "They are more likely to remain obese as adults and to have more difficulty in losing fat and maintaining fat loss than people who become obese as adults."

CHILDREN'S ASPIRIN POTENCY AND NUMBER BOTTLED IS LIMITED

NO BOTTLE of children's aspirin sold after July 1, 1967, will contain more than 36 tablets in a joint government-industry effort to reduce accidental overdose.

THIS RESTRICTION was one of several steps announced jointly by the Food and Drug Administration and 32 drug firms after a conference aimed at curbing childhood deaths and illnesses.

ALSO by July 1, bottles of children's aspirin will contain this cautionary label:

"Precaution: No cap is 100% childproof. In case of accidental overdose, notify physician immediately."

ALSO AGREED ON was a limitation in the potency of children's aspirin. Some now range as high as five grains a tablet. The new limit will be 1¼ grains.

NATION'S HOSPITALS NEED HELP

DR. WILLIAM H. STEWART, Surgeon General of the Public Health Service, says the nation's hospitals need 20% more professional and technical workers—primarily nurses—to provide the best patient care.

STEWART'S statement accompanied a joint U.S. Public Health Service-American Hospital Association survey which showed that more than 80,000 additional nurses and 40,000 practical nurses are needed, plus 50,000 aides in general hospitals, 30,000 in psychiatric institutions, 9,000 medical technologists, 7,000 social workers and 4,000 physical therapists, x-ray technologists and surgical technicians.

NEW TASK FORCE APPOINTED

JOHN W. GARDNER, Secretary of Health, Education and Welfare has appointed a six-member Task Force on Environmental Health and Related Problems and instructed it to "think at least 50 years ahead."

CHAIRMAN of the Task Force is Ron M. Linton, who was, until last September, staff director of the Senate Committee on Public Works and is now associated with Urban America, Inc.

THE TASK FORCE will be concerned, Linton said, not only with such obvious threats to health as air and water pollution but with "crowding, noise, lack of open space, lack of mobility, dirt." The Task Force will hold hearings in a number of cities, and is scheduled to report to Gardner by June 1, 1967. ◄

About Our Cover

Preparation against disaster has been the theme of many programs and projects since the conclusion of World War II. These programs were initiated shortly after that period since the possibility of global war was indeed a grim possibility . . . and still is for that matter.

However, agencies, both voluntary and official, have found that community organization against disaster has served in times of local disasters throughout the last 15 to 20 years including earthquakes, hurricanes, tornadoes, forest fires and such traumatic experiences as the Indianapolis Coliseum tragedy. Functioning together, effective disaster teams have saved many lives.

With the advent of the Indiana State Medical Association's television series on Medical Self-Help, beginning at 9:30 a.m., Tuesday, January 10 and continuing for 15 consecutive Tuesdays, the association is assuming another obligation as the authoritative source for informing the public of what they can do in medical emergencies when no doctor is available . . . another grim possibility in these times of mass destruction potential.

The Committee on Disaster Preparedness of the ISMA's Commission on Public Health feels that these television shows, aired on WTTV-TV, Channel 4, Indianapolis, will add significantly to the individual citizen's knowledge of what he can do if such situations arise.

The medical association's special thanks go to WTTV-TV, the Indiana State Board of Health and the Woman's Auxiliary to ISMA for their support and cooperation in this educational effort.—K. W. B.


Let's get
down to earth
about
diuretics

With Hygroton, you'll discover that you can almost always use fewer tablets than is possible with other diuretics.

You may be told that a new short-acting diuretic was found more effective than Hygroton in congestive heart failure—but this was when twice the manufacturer's maximum recommended dose was given.* At the maximum recommended dose for both diuretics, two tablets of Hygroton were far and away more effective than five tablets of the other diuretic in producing natruresis and weight loss. And at these dosages, Hygroton costs only ⅓ as much as the other diuretic.

Since the discovery of chlorothiazide, the trend has been away from short-acting, multiple-dose, high-cost diuretics. With Hygroton you can usually do the job with just one tablet a day, or every other day.

More than any of the newer diuretics, Hygroton brings dosage and cost of medication down to earth.

*Brest, A. N., et al.:J. New Drugs 5:329, 1965.

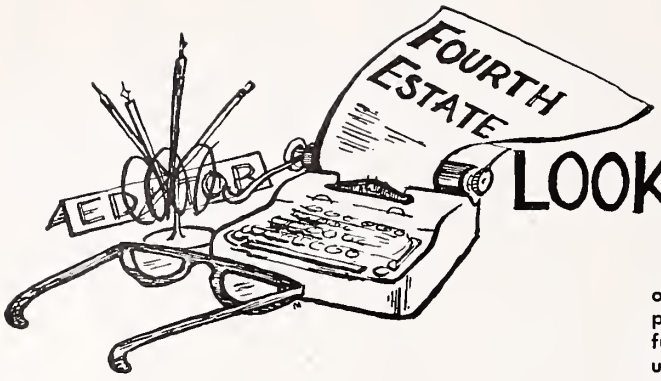
Hygroton®
chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water. **Contraindications:** Hypersensitivity and most cases of severe renal or hepatic disease. **Warning:** With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind. **Precautions:** Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. **Side Effects:** Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration. **Average Dosage:** One tablet (100 mg.) with breakfast daily or every other day. **Availability:** Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

HY-4735

Geigy Pharmaceuticals
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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

The Medicare Mess

The next time you pay a hospital bill, notice that the room rates have gone up. The reason is that the Federal government, for the first time, is forcing you to pay directly part of someone else's hospital bill.

This compulsory "charity"—estimated at $1 to $2 more a day for a hospital room—results from the government's Medicare program which is not fully compensating hospitals for treatment of Medicare patients.

Local hospitals, as well as most throughout the country, are discovering that Federal reimbursement of Medicare costs does not cover the Medicare patient's share in depreciation of equipment and capital improvements. Hospitals have to get that money somewhere if the quality of medical services is not to deteriorate. So the burden falls, in turn, on the paying customer who will fork out more than his fair share.

Hospital officials estimate five percent of a patient's net bill goes for capital improvement. In the case of Medicare patients, the government allots two percent for that purpose, leaving three percent of a subsidized patient's bill to be paid by regular customers.

By operating in this manner, the Medicare program is creating pressure for its expansion to other segments of the population. More and more people, because of Medicare, are going to find it increasingly difficult to meet their own needs independently and more and more hospitals will ask additional tax subsidies. Thus momentum will gather for new extensions of the program—a chain reaction that could lead in time to full socialization of medicine.

In its short time of operation, the Medicare program is bearing out the forecasts of critics who predicted widespread dislocations and bureaucratic growth of the program at the time of its enactment. As a starting point to find a way out of the Medicare mess, it would be instructive to recall who was right and who was wrong in projecting the future at the time of the congressional debates.

The evidence in hand suggests a total revamping of the Medicare program is needed to interdict the course on which the medical field has been set by the Federal government. There are numerous ways to provide for the medical security of older citizens, through tax credits and other inducements to private effort, without the tragic confusions Medicare is creating. —*Indianapolis News*, Nov. 26, 1966.

Zeroing In On Measles

Everyone, practically speaking, has a childhood bout with measles. This has resulted in the disease becoming a prime case of familiarity breeding contempt. Measles is no joking matter, however. Not a few of its victims, down through the centuries and to this day, have been left mentally retarded.

This gives particular reason for strong popular support of the U. S. Public Health Service campaign, just being launched, to eradicate measles in this country. Surgeon General William H. Stewart believes that through use of vaccines licensed within the past few years we could "achieve the eradication of measles from the United States in 1967." That is a goal worth working hard to attain.

The Public Health Service plans a four-pronged attack during the winter and spring. It will aim at immunization of all children at age one; immunization on entry into school of all children not previously vaccinated; the recording of all measles cases through coordinated effort by local, state and federal health officials, and the tracing of each measles case to its source to guard against spread of the disease.

This program will be the success it could be only if there is cooperation from doctors, school and health officials, and above all the general public. Measles can be made to go the way of smallpox, diphtheria and poliomyelitis if we make good use of the weapons medical research has provided.—*Terre Haute Tribune*, Nov. 15, 1966.

Venerable Institution

One of the most venerable institutions in America is the American Medical Association. The AMA is the principal spokesman for the medical profession in the United States. Its wide-ranging activities in scientific and medical matters have made it, perhaps, the most important association of its kind in the world today. In the words of one of its top officials, "The American Medical Association, since its founding 118 years ago, has matured into a dynamic and vital force in the affairs of this nation. Its numerous and varied programs affect the

Continued

winter 1966

DORSEY Season

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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts



"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.[1]

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.[2]

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.[3] The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.[4] The cilia then sweep the particulate matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.[5]

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.[6] The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.[7] The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.[8]

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.[9] In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.[10] The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.[11] The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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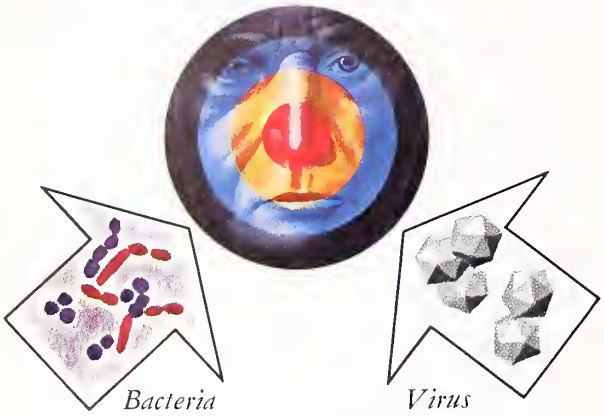
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cipitate an attack of rhinorrhea in hay fever sufferers.[12] Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.

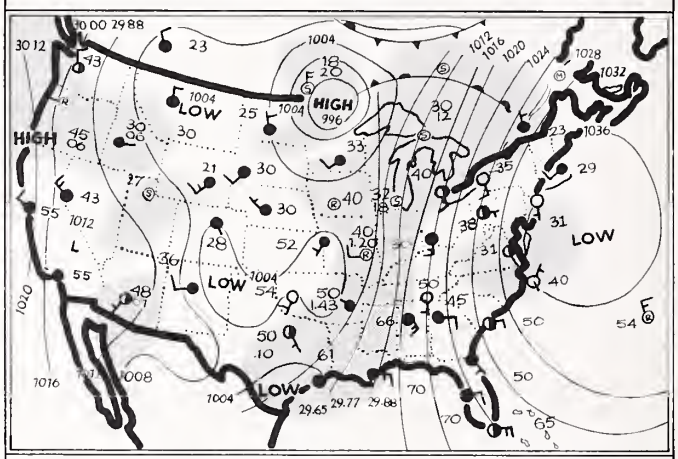


The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.[13] This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections,antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases, symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

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lives of all citizens of this country and millions of other people around the world."

Many people think of the AMA as primarily a voice for the medical profession on important medical issues, such as Medicare. It does, in fact, speak out on issues where it feels it must do so in the best interests of high medical standards and the health of the people. But, its role in controversial public issues is minor compared to its main task of helping the profession it represents and the American public adjust to an explosion of medical and scientific knowledge, unprecedented in the history of mankind. For example, the Department of Mental Health of the AMA has been responsible, not only for distribution of information, but development of key concepts affecting the health of millions of persons. Another department is concerned with foods and nutrition. And still another is responsible for collecting, evaluating and disseminating information on drugs and cosmetics. In 1965 it made available to the association members, 108 scientific publications dealing with these subjects.

Another important activity of the AMA involves the periodic accreditation surveys of medical schools, as well as similar surveys of internship and residency programs. In short, the American Medical Association, in a very large part, must be given credit for the present stature of the medical arts and sciences in this country.—*Goshen News*, Nov. 14, 1966.

Hobbles Medical Progress

As medical science heads for the 21st century, what wonders to perform, a 400-year-old oddity of English common law stands in the way—in at least 10 states—of the development of what will surely be a commonplace technique in the next century, the transplantation of human organs.

Even today, an unknown number of persons each year are being condemned to disability and sometimes death because of the law which says an individual may not make an arrangement for the disposal of his body or part of it after his death in any manner violating the right of his spouse or next of kin to bury it.

According to the American Medical Association's Law Division, 35 states have passed laws permitting an individual to will his body to medical science. Five others—Alaska, Georgia, Hawaii, Virginia and West Virginia—allow the donation of eyes only.

But 10 states follow common law rules: Delaware, Idaho, Kansas, Massachusetts, Montana, New Hampshire, Ohio, Utah, Vermont and Wyoming.

In Massachusetts, where some of the leading work in transplantation is being done, the legislature this year for the third time defeated a bill that would allow residents to will their bodies or parts of them.

Although permission from next of kin is usually granted, physicians complain that by the time it is obtained it is ordinarily too late. Because of this, there is a long waiting list for eye donations and in the case of kidney transplants, charges one spokesman for a Massachusetts hospital, as quoted by the Health Bulletin, "hundreds of people die every year who might have been saved."

It is not only in the matter of tissue and organ transplantation that the common law conflicts with common sense. It is a hindrance to medical education and research.

An increasing supply of cadavers is needed, says the AMA, for the more and more medical and osteopathic schools being built and for the training of nurses, dentists and others.—*Franklin Star*, Nov. 21, 1966.

A Welcome Project

Indiana University is planning facilities that should prove of great help in fighting one of the state's unattended but urgent problems: Mental retardation among children.

Officials say that of 60,000 mentally retarded children in Indiana who could benefit from special attention in the public schools, about 86% are not getting proper treatment. Meantime, Indiana state hospitals and private associations provide programs for only 7,000 or so retarded youngsters.

The I.U. Medical Center here in Indianapolis is planning a five-story addition to the new James Whitcomb Riley Hospital for children; construction will begin soon and the new facility will provide retardation outpatient care and a mental retardation clinic designed to handle 40,000 patient visits a year.

L. L. Merritt Jr., chairman of the steering committee for the new program, says diagnosis will be available for mentally retarded children from all over the state. The facilities here will be integrated with another project in Bloomington.

It is apparent that, with such a large percentage of retarded children not receiving proper attention in Indiana, the I.U. project by itself cannot hope to solve the problem.

But it will provide training for a great many of these youngsters, and it is therefore a welcome step in the right direction.—*Indianapolis News*, Nov. 26, 1966. ◄


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The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by The COUNCIL

Volume 60 — January 1967 — Number 1

Report of a case of primary aldosteronism which exhibited severe hypokalemia early in diuretic therapy, and which apparently had normal aldosterone excretion. The plasma renin suppression test however was positive and surgical exploration revealed a tumor which on removal produced a cure. Suppressed renin activity is demonstrable early and in mild cases is the most valuable single test at this time.

Primary Aldosteronism:

Case Report with Plasma Renin Suppression†

JOSEPH C. MAROON, M.D.*
GEORGE T. LUKEMEYER, M.D.**

CONN has estimated that 20% of patients with "essential hypertension" can be cured by excision of aldosterone-producing adrenal tumors.[1] This figure may be high; however, when one considers that there are an estimated seventeen million patients with "essential hypertension" in the United States, even an incidence of five percent would mean that a staggering number of patients have surgically curable hypertension.

A case of Conn's syndrome, misdiagnosed as "essential hypertension" for eight years, with a discussion of the problems of diagnosis and the role of plasma renin suppression in primary aldosteronism form the basis of this report.

Case Report

A 31-year-old white housewife was first diagnosed as having "essential hypertension" in 1954. She was treated with diuretics and antihypertensive medication. Later, she experienced episodes of myalgia, weakness, headaches and diarrhea. Hypokalemia was demonstrated during one of these episodes and the administration of oral potassium supplements with the discontinuance of diuretics temporarily alleviated the symptomatology.

In April, 1963, the symptoms recurred with increased severity and were accompanied by visual disturbances, paresthesia and intermittent paralysis of the extremities. The serum potassium determinations remained below 3 mEq/L despite potassium supplementation. She was, therefore, referred to the Indiana University Medical Center on April 12, 1963.

Physical examination revealed a blood pressure of 200/120 mm Hg. a regular pulse rate of 84 per minute and a normal temperature. A grade II Keith-Wagner retinopathy was observed. On cardiac examination the PMI was in the fifth intercostal space at the left midclavicular line. A grade II short systolic murmur was heard over the entire precordium. No bruits were heard over the abdomen or flanks and no peripheral edema was detected. Neurological examination showed generalized muscle weakness and hyperactive muscle stretch reflexes.

The urine pH was persistently alkaline. She failed to concentrate urine above 1.013 with pitressin stimulation. The serum electrolytes were as

† This study was supported in part by Grant 5461-05, U.S. Public Health Service, Bethesda, Maryland.

* This work was done during Dr. Maroon's tenure as a student research fellow in Clinical Therapeutic Studies in Renal Metabolism, I. U. Medical Center, Indianapolis. Dr. Maroon is currently with the Department of Surgery, Georgetown University, 3800 Reservoir Rd., N.W., Washington, D. C. 20007.

** I. U. Medical Center, Indianapolis 46207.

follows: sodium 142 mEq/L, potassium 3.1 mEq/L, chloride 88 mEq/L, CO^2 combining power 43.4 mEq/L. The urinary sodium was 40 mEq/L/24 hours. The urinary aldosterone level, measured in the Bio-Science Laboratories in Los Angeles, California, was 3.3 ug/L/24 hours (normal range 3 to 32 ug/L/24 hours). No plasma renin activity was detected by Helmer's method[2] on samples obtained by selective renal vein catheterization.

The following laboratory values were within normal limits: BUN, fasting blood sugar, serum creatinine, serum calcium, serum phosphorus, prothrombin time, serum cholesterol, PBI, 5 hydroxyindole-acetic acid, 17 ketosteroids and catecholamines. The electrocardiogram demonstrated prominent "u" waves compatible with hypokalemia. Chest x-rays, an intravenous pyelogram and renal angiograms were normal. A regitine test was negative. A percutaneous renal biopsy revealed normal glomeruli and well preserved tubular epithelium. Nerve conduction studies and an electromyogram were within normal limits.

Hospital Course

The patient was given a 500 milligram sodium diet and potassium supplements. Subsequently, her serum electrolytes and electrocardiogram returned to normal, and her blood pressure remained in the range of 160/100 mm Hg. without any antihypertensive medication. Primary aldosteronism was considered unlikely because of the low-normal value of aldosterone excretion. It was thought that her hypokalemia was probably secondary to thiazide diuretics.

After three and one-half weeks of hospitalization, she was discharged, significantly improved. In the ensuing 12 months she was given therapeutic doses of triamterene, oral potassium, guanethidine and hydrochlorothiazide. Her serum potassium was persistently low and during one episode of tetany it was found to be 1.6 mEq/L.

She was readmitted to the hospital on October 2, 1964. The physical examination was unchanged from the previous admission. Laboratory studies summarized in Table I again revealed hypokalemia (2.6, 2.9, 2.8, 2.8 mEq/L), hypochloremic alkalosis, low 24-hour urinary sodium and potassium values and hypocalcemia. The serum magnesium was 2.1 mg %. An adrenal exploratory operation was performed and a 1.7 gm. adenoma was removed from the left adrenal gland. Histologically this was a true neoplasm with no evidence of invasion.

Postoperatively the electrolyte values returned to normal and her general physical condition improved. The 24-hour urine aldosterone level obtained preoperatively was later reported to be 33 ug/L/24 hours. Two separate postoperative samples of peripheral venous blood revealed renin values of 0.093 and 0.110 G.U./L (normal range: 0.03 to 0.12 G.U./L.) The patient has continued to improve and is presently normotensive and free of any symptomatology.

Diagnostic Criteria

Primary aldosteronism has become a customary consideration in the differential diagnosis of hypertension since Conn's original description in 1955.[3] This report exemplifies the typical findings of this syndrome, including the diagnostic triad of hypokalemia, elevated aldosterone excretion

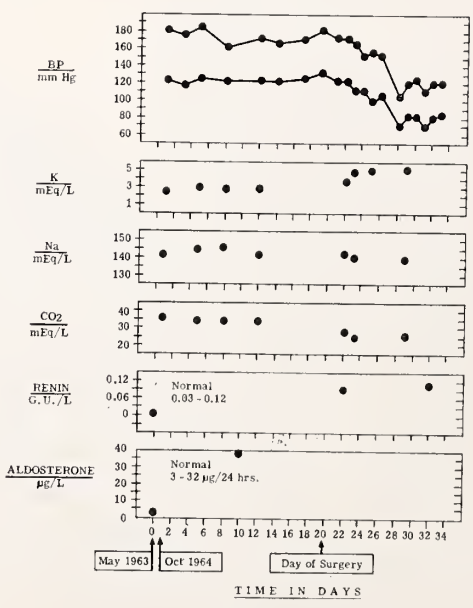


TABLE I
SUMMARY of laboratory data before and after excision of the tumor.

SUMMARY OF FINDINGS IN 145 CASES OF PRIMARY ALDOSTERONISM[4]

1. 72% of cases between ages of 30 to 50
2. Female to male ratio: 2.6 to 1
3. Most common symptoms and findings:
   - Hypertension 100%
   - Hypokalemic-hypochloremic alkalosis 100%
   - Muscle weakness 73%
   - Nocturnal polyuria 72%
   - Headache 51%
   - Polydipsia 46%
   - Paresthesias 24%*
   - Paralysis 21%*
   - Tetany 21%*
   - No symptoms 6%
4. Other important aids in diagnosis: pitressin resistant hyposthenuria 80%, impairment in urinary acidification 80%, normal urinary 17-keto and 17-OH steroids.

* Note virtual absence in males.

TABLE II

and preoperative suppression of plasma renin activity. Table II summarizes the abnormalities found in a review of 145 cases of this disease.[4]

Unfortunately, other entities are characterized by hypertension, potassium wasting and excessive aldosterone secretion and may closely simulate primary aldosteronism.

Renal artery obstruction is an important consideration since a significant increase in aldosterone secretion has been found in 40% of patients with this disease.[5] Angiography, elevated levels of plasma renin activity,[6] and split renal function studies will usually demonstrate this abnormality.

In children and adolescents, *juvenile or congenital aldosteronism* must be considered. It is associated with a markedly elevated blood pressure, an increased BUN, papilledema, hyponatremia, epistaxis, convulsions and encephalopathy. This severe symptomatic hypertension resembles *malignant hypertension*, which also must enter into the differential diagnosis. Primary aldosteronism, however, is characterized by a benign, non-

progressive course with the diastolic blood pressure usually below 120 mm Hg.

Elevated aldosterone secretion may be found in *adrenal tumors* which produce Cushing's syndrome. These tumors are also associated with increased 17-ketosteroid and oxysteroid levels. These values must be normal in order to diagnose primary aldosteronism. *Potassium wasting renal diseases*, such as chronic pyelonephritis, can strikingly resemble primary aldosteronism. They are further characterized, however, by acidosis, hyponatremia, and hypovolemia; whereas alkalosis, hypernatremia and hypervolemia are usually present in aldosteronism.

The secondary kaliuretic effects of *diuretic therapy* in hypertensive patients may lead to a false initial diagnosis of primary aldosteronism. This case emphasizes the important corollary that a pre-existing tumor was first suspected because of the unusual severity of the thiazide precipitated potassium loss. In fact, severe muscle weakness developing early in the course of thiazide administration should alert one to the diagnosis of an aldosterone-secreting adenoma.[4,5]

Aldosterone Determination

By definition, an elevated level of aldosterone excretion is to be expected in primary aldosteronism. From the above discussion it is apparent that an elevated value may be found in many conditions. Although the random finding of a normal urinary aldosterone level should suggest other diagnoses[7], this alone does not eliminate primary aldosteronism as a diagnostic possibility. As the present case and others[8] exemplify, even repeated assays may not be significantly elevated in true aldosteronism.

Other considerations of aldosterone metabolism help to clarify these disconcerting findings. Table III summarizes the factors sometimes resulting in misleading urinary aldosterone values. Obviously, inadequate dietary preparation as well as many common clinical conditions can give confusing

FACTORS SOMETIMES RESULTING IN MISLEADING URINARY ALDOSTERONE ASSAY VALUES

Diet (should receive 200 mEq Na and 60-80 mEq K for three days prior to sample collection)
Congestive heart failure
Malignant hypertension
Liver disease
Renal insufficiency
Pregnancy
Birth control pills
Diuretics
Corticosteroids
Intravascular volume depletion

TABLE III

results. Urinary excretion of aldosterone amounts to only five percent of the total produced daily by the adrenals; therefore, errors arising from collection as well as in chemical determination could assume great importance. Moreover, there is significant day-to-day variation in the amount of aldosterone secreted by normal subjects as well as by patients with primary aldosteronism, and repeated determinations are usually needed to detect abnormal production.[5]

The above facts emphasize that as with any laboratory procedure, aldosterone assays must be interpreted in the light of the clinical findings, and this determination alone will not consistently make the diagnosis nor indicate the treatment.

Role of Renin

With the elucidation of the kinetics involved in the renin-angiotensin system has come the recent demonstration of a most important diagnostic test for primary aldosteronism—suppression of plasma renin activity.[9]

Renin was first demonstrated to be an enzyme elaborated by the ischemic kidney.[10,11] The actual site of release was later found to be the juxtaglomerular cells in the afferent glomerular arterioles. According to current concepts,[12] these cells function as a barostatic mechanism extremely sensitive to renal perfusion pressure and intravascular volume changes as well as being intimately associated with renin release. With the *decrease* in renal blood flow which occurs in renal artery stenosis, there is a greatly augmented plasma renin level.[6] In other words, with a decrease in tension or "stretch" on the juxtaglomerular apparatus, there is a compensatory increased renin release.

It was theorized that with the *increased* renal blood flow secondary to sodium retention and intravascular expansion produced by an autonomous secreting aldosteronoma, the increased "stretch" in the afferent arteriole should influence the cells to release less renin.[13] This latter phenomenon has now been clinically confirmed by several investigators,[9,14,15] and it was demonstrated in this case.

The recent report of normokalemic primary aldosteronism masquerading as "essential hypertension"[16] has given additional emphasis to the diagnostic value of renin suppression. Previously, the biochemical aberration of hypokalemic alkalosis was considered necessary for the diagnosis. This abnormality is now considered a function of the severity and duration of primary aldosteronism. Suppressed renin activity, however, is extremely sensitive in early or mild cases and together with increased aldosterone levels is diagnostic of primary aldosteronism.

Summary and Conclusion

In addition to demonstrating the obvious abnormal findings in primary aldosteronism, this case has served to emphasize the following points:

(1) Hypokalemia of unusual severity occurring during diuretic therapy for hypertension should alert one to the possibility of an aldosteronoma.

(2) Aldosterone excretion assays alone are not diagnostic since technical factors and other pathologic entities can give misleading results.

(3) Plasma renin suppression is probably the most valuable single test for primary aldosteronism at this time.

It would indeed be remarkable if 20% of patients with "essential hy-

pertension" could be cured by adrenal surgery. Several prominent investigators, however, view this figure with skepticism. It is agreed that with the demonstration of renin suppression, a considerable advance has been made in the study of hypertensive patients and presumably many cases of primary aldosteronism are misdiagnosed as "essential hypertension." It is hoped that with refinements in renin and aldosterone testing technics, a truer evaluation will be obtainable. Until then, as Conn stated ". . . all patients with unexplained hypertension must be regarded as potentially curable by means of surgical removal of a small aldosterone-producing adrenal adenoma."[16]

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* * *

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Infectious mononucleosis is susceptible to routine diagnosis and presents itself as a distinct clinical syndrome if strict diagnostic criteria and appropriate laboratory methods are utilized. With typical clinical symptoms and findings together with typical hematological results and a heterophile antibody titer of 1/224 or greater, no other test is needed for a reasonably certain diagnosis. If any or all of these criteria are abnormal, the differential absorption test should be used. In this series no advantage could be demonstrated for therapy with steroids.

Infectious Mononucleosis

(Current Concepts and Data From 104 Previously Unpublished Cases)

MAC C. ROLLER, M.D.
West Lafayette

INFECTIOUS mononucleosis is an acute self-limited disease. It would not merit much discussion but for two reasons. In its clinical spectrum it can render a patient quite toxic, and its clinical and laboratory manifestations can, if not carefully considered, cause confusion with several diseases which carry a significantly graver prognosis.

Investigators of this disease recently have emphasized the need for strictness in diagnostic criteria.[1,2] They point out that when adherence to these criteria is maintained, this entity becomes more distinct. Less evidence is then shown regarding the previous concept of very "protean" symptoms.

It has long been agreed that the very name is misleading. The enigma of the etiology and mode of transmission are still unsolved.

As with many diseases, infectious mononucleosis can manifest itself in different degrees of severity. Some patients run a quite benign clinical course, whereas others may be acutely ill, toxic to the point of prostration, and exhibit "severe manifestations" or complications.

Most of us are aware that some series previously reported have indicated how frequently varied presenting signs and symptoms led the physician away from the correct diagnosis. Recent reports,[1,2,3] this series, and my experience with many other cases indicates that clinical symptoms and signs, while not specific, are uniform enough in most patients for the examiner to consider the disease. A blood smear and appropriate serologic tests should then obviate any clinical uncertainty even when infrequent manifestations such as central nervous system involvement, hepatitis, thrombocytopenic purpura or hemolytic anemia are present.

In infectious mononucleosis, the most difficult area in which to achieve agreement is also the most important. How can we unequivocally establish the diagnosis of this entity? Much of the misunderstanding regarding infectious mononucleosis has occurred when medical literature reported cases with unusual manifestations where stringent guidelines in diagnosis were not followed. It seems relatively certain that some cases of "acute leukemia with cure" reported many years ago were in reality cases which, with the benefit of our present knowledge and laboratory procedures, would have been shown to be infectious mononucleosis.

Current investigations have resolved many of the areas of earlier confusion. Room for discussion still exists but close agreement in diagnostic criteria is being achieved.

Case studies clearly indicate that the diagnosis of infectious mononucleosis should be considered in terms of clinical and laboratory findings. To substantiate a diagnosis on the basis of one without consideration of the other is hazardous.

Clinical Picture

The vast majority of patients with infectious mononucleosis will at some point in the course of the disease, and generally within the first 14 days, indicate several of the following symptoms. a) A pharyngotonsillitis subjectively, objectively, or both, with or without an exudative phase; b) lymphadenopathy, generally cervical and most often in the posterior chain, but anterior, submandibular, axillary or other nodal areas may be involved; c) fever, headache, malaise, splenomegaly, hepatomegaly, jaundice or abdominal discomfort of some description. In most reported series about

80% of the patients manifest throat discomfort, cervical adenopathy and fever.

Hematological Picture

Changes in the blood picture, while not specific, are virtually essential in consideration of the diagnosis of infectious mononucleosis. At some point in the disease, generally within the first 10 days (Hoagland says *for* 10 days[1]), lymphocytes should constitute 50% or more of the leukocytes examined in the peripheral smear and an "appreciable number" 60% to 90% (40% to 50% acceptable although here various investigators have some disagreement[2,3]) should be the atypical lymphocytes described by Downey and McKinlay.[4]

Serological Criteria

Most investigators agree that a positive heterophile antibody titer is required. The exact level of titer necessary is open to some discussion. As is generally known, the most commonly used serological test has been the heterophile antibody test using sheep cells. This test alone is only presumptive evidence of infectious mononucleosis. Titers in high dilutions have been reported in patients with leukemia, horse serum reactions, infectious hepatitis, atypical pneumonia, lymphosarcoma and other conditions.

Some say that the diagnosis can be established if the titer is low or rising especially if the clinical and hematological findings are characteristic. However, this "low titer diagnosis" is one of the areas of most controversy. Where the titer is low (1/112 or less) and/or the clinical course not characteristic — the hematological criteria must be met[1,5] — the differential absorption test utilizing the presumptive sheep cell titer followed by guinea pig kidney and beef cell absorption studies should be utilized before a diagnosis is considered unequivocal.

I feel that when the clinical and hematological findings are characteristic, the diagnosis can be substantiated if the presumptive test has a titer of 1/224 or more. In cases with unusual clinical findings or low titers, the differential test should be necessary for diagnosis. Recently Hoff and Bauer[6] have described a new rapid slide test for infectious mononucleosis. This is regarded as a presumptive test and in my experience a positive result has been noted when the sheep cell titer reached a dilution of 1/56 or greater.

In view of the foregoing, the typical patient with infectious mononucleosis would complain for a few days of sore throat, headache and malaise. He would be running a fever, exhibit posterior cervical adenopathy, splenomegaly, have a blood picture of lymphocytosis of 50% or more with half of these atypical lymphocytes. A positive differential absorption test would be present. Fortunately in the majority of patients this will be true. With these criteria, few diagnoses should be in question.

Consideration must be given to the time that the laboratory tests are made. Very early or very late in the disease the picture will change. Bender[2] has found that the heterophile titer will rarely, if ever, not be positive at some point within the first two weeks of the disease.

The data presented here are based on observations of 104 hospitalized patients, all college students aged 17 to 26 years, examined at the Health Center, Purdue University.

Because of the generally familiar clinical pattern of infectious mononucleosis, most cases were diagnosed correctly on clinical grounds. Diagnosis was established on the remainder after appropriate laboratory examinations. The criteria for diagnosis in this group of cases was that listed above. When clinical and hematological findings were characteristic, the differential absorption test was not always used but a heterophile titer of 1/224 or greater was required in all cases.

This series necessarily includes some of the more toxic cases since all were in-patients. It by no means includes all of the cases of infectious mononucleosis examined here. A review of our clinical laboratory records during a comparable time interval indicates reports of over 207 heterophile antibody tests with a titer of 1/224 or greater. I add this since, in our experience at Purdue, we find that the majority of patients with this disease (contrary at least to popular lay belief) do not require even the first day of bedrest.

In this series, with few exceptions, the patients presented themselves for examination within the first 10 days of their illness, generally on about the fourth day of clinical symptoms. The initial laboratory work was done at the time of examination and most of the diagnoses were thus established within the first 10 days after the onset of symptoms.

Discussion

Table 1 lists the incidence of *subjective* symptoms reported by these patients at the time of their *initial* examinations. When the clinical courses of these patients were followed, it was noted that while 57 complained of sore throat at the time of the initial examination, 91 complained of sore throat at some time in their illness and 53 were observed to have an exudative tonsillar phase. Thirty-one complained of swollen neck glands at their initial examination but 88 manifested palpable cervical lymphadenopathy at some point in the course of the disease.

INITIAL SUBJECTIVE SYMPTOMS REPORTED BY PATIENTS

Sore throat	57	(91)*
Fever	44	(103)*
Headache	33	
Swollen (cervical) glands	31	(88)*
Malaise	27	
Fatigue	18	
Head cold	18	
Chills	17	
Nausea	16	
Cough	8	
Dizziness	5	
Anorexia	4	
Stiff neck	2	
Dysphagia	1	
Dark urine	1	

* Number who developed this symptom later in the course of their illness.

TABLE I

Forty-three had enlarged anterior and posterior cervical lymph nodes. 24 had only posterior cervical enlargement, while 15 had anterior adenopathy only. Thirteen had submandibular adenopathy and two had palpably enlarged axillary nodes.

A significant number of these patients had subjective or objective findings referable to the abdomen. The spleen was palpably enlarged in 22, the liver in seven. Four had clinical jaundice, 19 had nausea and 10 had emesis. Eight complained of abdominal pain other than that experienced when an enlarged liver or spleen was palpated.

In this series 29 had a clinically toxic phase with fever spiking daily to 103-104°, diaphoresis with generalized aching and malaise and were truly in need of bed care. This phase usually lasted three to four days but a somewhat longer time was not unusual. These patients also demonstrated rather consistent fever curves which fell into four general patterns as shown in Figure 1. There was no distinct clinical correlation between the degree of illness and the fever curve in the series except that all patients with a type 4 fever curve had a relatively benign clinical course. All patients who were clinically toxic had a fever curve corresponding to type 1, 2, or 3.

Since one of the main patient complaints in nearly every series reported is the pharyngotonsillar phase, and since this is generally the most distressing subjective symptom especially when associated with an exudative

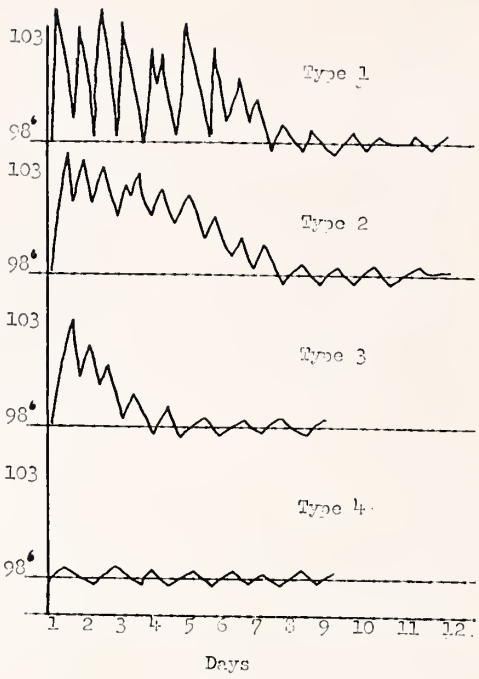


FIGURE 1
FEVER curves noted in 104 patients with infectious mononucleosis.

phase, the cases were evaluated with this in mind.

Steroids Ineffective

It has been well established that antibiotics do not affect the course of the pharyngotonsillar phase of infectious mononucleosis unless of course a secondary bacterial infection supervenes. Steroids, however, have been reported to give a beneficial and even dramatic effect in improving this situation. The clinical courses of these patients were evaluated according to whether this phase was treated with steriods or symptomatically, i.e., with analgesics and throat irrigations with or without antibiotics.

Forty-six patients were treated with steroids. The only cases evaluated, however, were those in which the diagnosis was established early, steroids started at the onset of the pharyngotonsillar symptoms and were used throughout this phase. Thirty-nine patients with sore throat, of which 32 had an exudative tonsillitis, fit this criterion. Despite steroid therapy, the average duration of the sore throat was 8.5 days and the exudative phase was 5.2 days.

When we then compare those treated symptomatically (35 patients of which 13 exhibited the exudative tonsillitis) the sore throat averaged 6.6 days and the exudative phase a similar 5.1 days (Tables 2 and 3). One can postulate that only those patients who were more ill clinically and therefore would be expected to have a longer clinical course anyway got the steroids. I could not argue this point, yet in this small series no significant and certainly no dramatic response to steroid treatment was encountered.

An associated clinical hepatitis developed in four cases. One documented case of thrombocytopenic purpura secondary to infectious mononucleosis was recorded and a transient pneumonitis was demonstrated radiographically in one patient during the first week of the patient's illness. VDRL tests were routinely done on admission at our hospital. No positive reactors were found in this series. While this test was done only one time during the clinical illness, these findings would lend some support to recent

SORE THROAT PHASE (SUBJECTIVE) OF CASES

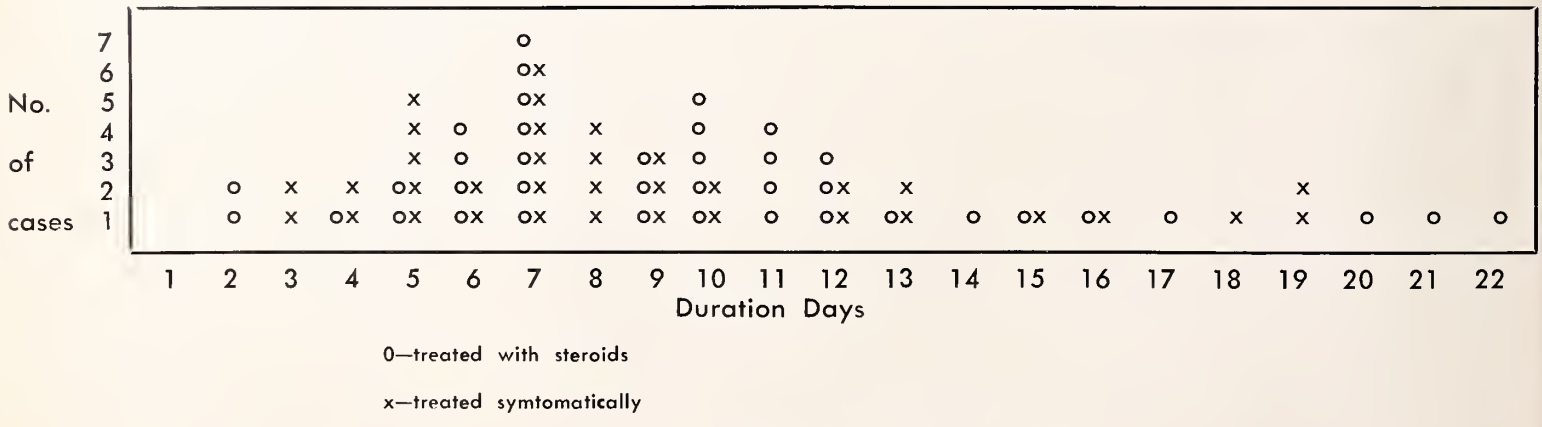


TABLE II

publications indicating that biological false positive serological tests for syphilis are far less common in infectious mononucleosis than was formerly indicated.[7]

My experience at the university with many more cases than reported here indicates that the majority of patients do not require bedrest and are fully ambulatory throughout the course of their disease. The need for "dropping out of school" and expecting to be "tired for weeks" has been vastly overplayed by some physicians and by the public. Patients who develop a clinical (not laboratory) hepatitis may, however, be expected to lose significant time and require a longer period for recuperation. Some of them may need to withdraw from school or diminish their academic load considerably.

In patients who do not develop jaundice and in whom other complications are not clinically evident, repeated blood tests, once the diagnosis has been established, are of academic interest only. Repeated examinations for the number of lymphocytes or the level of the heterophile titer do not aid in treatment or in determining the patient's ability to return to or continue his usual activities. Clinical criteria alone should be sufficient.

Of all cases studied here, no correlation between heterophile levels and seriousness of the disease was encountered. Patients with higher heterophile levels were not clinically more ill nor did they require a longer time to become entirely asymptomatic. In fact, half of the toxic patients had titers of 1/448-1/896 and those with higher titers were generally less bothered by their disease.

Conclusion

In the vast majority of patients with infectious mononucleosis, the clinical findings will be suggestive enough to lead the examining physician to the proper diagnosis. Those findings are less "protean" than we have been led to believe. Both the clinical and laboratory findings should be considered in diagnosis. In the absence of a leukocytosis with 50% or more atypical lymphocytes, the diagnosis should be questioned. In the presence of proper hematological criteria, when no significant clinical findings exist or when absolute diagnosis is essential, the differential absorption test should be used. With significant clinical criteria, proper hematologic findings and a presumptive heterophile antibody titer of 1/224 or greater, the diagnosis can be established with reasonable certainty.

In our series of 104 cases, the clinical findings approximated those of most other reported series. No substantial benefit was found, however, with steroid therapy in instances where it was used. If proper diagnostic criteria are maintained, the diagnosis of infectious mononucleosis should not be difficult.

Acknowledgment

The author wishes to thank J. Andre, C. Greenburg, and K. Ervin for performing many of the serological tests in this series of cases.

EXUDATIVE PHASE (OBJECTIVE) OF SORE THROAT

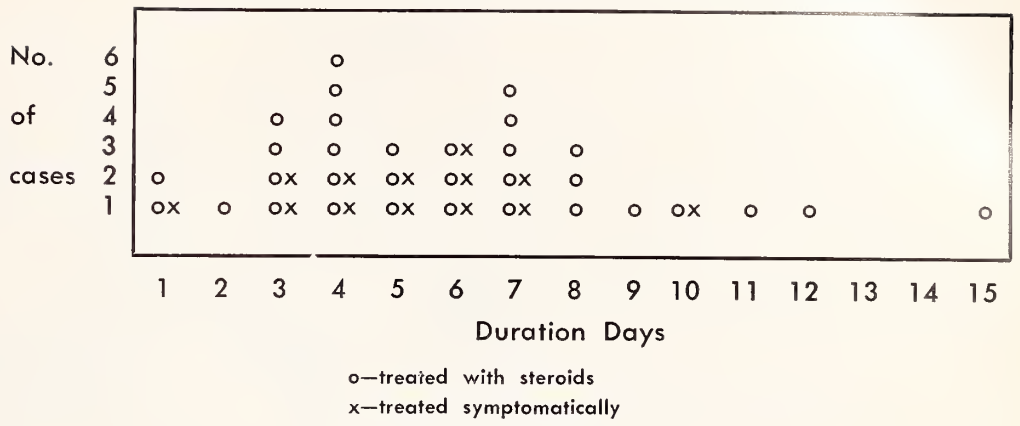


TABLE III

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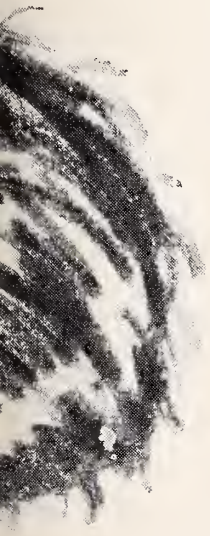
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One more case of toxic epidermal necrolysis is reported. It involved a brother of one of the two patients reported in this journal in 1964, and is probably the first to be reported in a sibling. The criteria for the diagnosis are reviewed, and treatment is outlined.

Toxic Epidermal Necrolysis Occurring in Siblings

ROBERT E. HANNEMANN, M.D.
Lafayette

TOXIC epidermal necrolysis or the "scalded skin syndrome" was described and named by Lyell in 1956.[6]

Potter and associates reported five cases in 1960 and presented an excellent review of the literature.[7] In 1964, I reported two cases which occurred in 1963 and 1964.[4] This made a total of seven reported cases involving American patients.

Since 1964, at least three new reports have appeared.[1,3,8] One of the most recent ones, by Tyson et al.,[8] concerned three infants, two of which were associated with the same phage group of staphylococcus aureus that has been implicated in Ritter's disease. This article will report the first cases occurring in siblings. The initial case was one of the two included in the author's original article and will be briefly summarized. A report on viral studies on the second patient will also be included. Viral studies have not been done previously in patients with toxic epidermal necrolysis, as far as I am aware.

Case Report No. 1

The family involved in these cases consisted of the following: A mother age 35, a father age 37, a daughter age 20 months at the time of her illness and a son 15 months younger.

The girl became ill in June of 1964. She was seen first on June 10th. She had had a respiratory illness for approximately five days. Her treatment had consisted of brompheniramine maleate (Dimetane) and aspirin. She was brought in because she had an unusual rash and was quite irritable. Her rectal temperature was 101. She had a very bright erythema of the face, neck and shoulders with a less prominent involvement of the remainder of the body except the distal portions of the arms and legs. Her skin was very painful when touched.

There was an exudative tonsillitis present so the child was started on penicillin therapy after a throat culture was obtained. Later that same day, flaccid bullae began appearing on the face, neck and upper trunk. There was a positive Nikolsky's sign (loosening of the epidermis caused by friction over the surface). The patient was hospitalized on that afternoon.

The following laboratory work was obtained: CBC: hemoglobin 11.5; hematocrit reading 43; white blood count 23,100 with 72 segmented cells, 17 lymphocytes, nine monocytes, one stab cell, and one eosinophile. Urinalysis: normal. Throat culture: Neisseria catarrhalis and unidentified gram positive cocci which were coagulase negative and which were sensitive to nearly all antibiotics including penicillin.

The child's illness progressed so that by the second day, she had involvement of her entire body with the exception of her palms and soles. Achromycin therapy was started on that day. A skin biopsy performed the following day verified the diagnosis of toxic epidermal necrolysis.

By the fourth hospital day the patient was markedly improved. This improvement continued so that she was discharged on June 19th, 1964. One week later she was seen again. At that time she had evidence of ruptured bullae on the palms and soles but was doing well. Since then the child has been normal. There have been no further skin problems or serious illnesses.

Case Report No. 2

The second case occurred in this family when the first patient's eight-month-old brother became ill on September 11, 1964. He was seen on that day also because of a rash and extreme irritability. The rash at that time appeared to be a scarletina type erythema. He also had an otitis media. His temperature was 99.8 rectally. A throat culture was done which subsequently showed non-hemolytic gram positive cocci in clusters. Penicillin therapy was started.

The patient was seen on the following day. At that time flaccid bullae began appearing on the face and neck. Later that day the inguinal, axillary, perianal and genital areas became involved. The child was admitted to the hospital on the third day of his illness. At that time he was noted to have a positive Nikolsky's sign.

The following laboratory work was obtained: CBC: hemoglobin 11.0 grams; hematocrit reading 31; white blood cells count 9,700 with 52 segmented cells, 45 lymphocytes, one stab cell and two eosinophiles. Urinalysis: 2+ sugar — subsequently negative for sugar. Conjunctival culture: staphylococcus albus. Throat culture: staphylococcus aureus and E. Coli. Blood culture: no growth. Viral studies on

the blood and throat swabs were done at the Indiana University Medical Center.

"The samples were screened for viable virus in Swiss-Webster suckling mice less than 24 hours old and in tissue culture. The types of tissue culture cells employed included Hep[2] (human epithelium), green monkey kidney (LLC-MK_1), and rabbit kidney (LLC-RK_1). The specimen was considered negative for an infectious agent after five consecutive passages in each cell system. Neutralization tests, employing patient's serum, were carried out against selected members of the echovirus, adenovirus, coxsackie virus, herpes virus, and vaccinia virus groups. While low titers to some of these viruses were demonstrated, none was sufficiently great to be considered significant, much less diagnostic."[5]

The patient's illness progressed in much the same manner as had his sister's. A skin biopsy, done on September 14, 1964, was read as compatible with toxic epidermal necrolysis. He was started on Achromycin therapy on September 15, 1964, at which time his temperature was 103.2 rectally. Within 24 hours, his temperature was normal and he was improving. As in the case of his sister, this child recovered very rapidly. He was released in good condition on September 22, 1964, 11 days after the onset of his illness.

Family and Environmental History

Because of the rarity of this condition the author obtained a detailed allergic and dermatologic history of the family involved. The mother has very "sensitive" skin. She gets "welts" with pressure and bruises very easily but has no definite allergies. She has a brother, aged 33, with no skin problems or allergy. The maternal grandmother is allergic to penicillin and in the past three years has developed an undiagnosed skin problem on her legs.

The father has a very positive allergic history. He has had hay fever and asthma since infancy and is allergic to milk and eggs. He has a niece with cow's milk allergy and eczema and two aunts with hay fever. One cousin also has scleroderma.

The patient's home is a prefabricated house in a middle-class neighborhood. There are no pets. The mother was very conscious of any new and possibly sensitizing objects or experiences after the first case occurred and was unable to report any such things preceding the second case.

Comment

In the author's original article[4], certain criteria for making the diagnosis of toxic epidermal necrolysis were drawn from Lyell's original description. The author has always felt that these criteria must be met to make the diagnosis. In some of the reported cases, this has not been true. These criteria were the following: "1) Preceding illness — usually an upper respiratory infection. 2) Sudden appearance of red, painful skin, strongly resembling sunburn or scald. 3) Bullae formation in 12 to 24 hours after the onset of erythema and pain. These bullae are flaccid and easily ruptured. 4) Positive Nikolsky's sign. 5) Histologic evidence of epidermal necrolysis with little or no involvement of the dermis." If these criteria are not met, the case may be one of erythema multiforme, dermatitis herpeteformis, pemphigus, Stevens-Johnson syndrome, Ritter's disease or a drug reaction.

The occurrence of this rare disease in two members of a family in such a short interval of time is puzzling. One could postulate that it is a hypersensitivity reaction to an unusual strain of virus or bacteria that was being carried by the original patient. This is particularly inviting speculation when there is such a strong family history of allergy and skin sensitivity.

Throat culture did not reveal unusual or consistent findings in either case. The bacterial studies were not extensive or complete, however. Viral studies on the second patient were negative but eliminated some of the more common viral agents. Although these studies were not diagnostic, the author believes that the etiology of this disease will probably be found in the bacteriology or virus laboratory. These studies will have to be detailed and duplicated on several cases. This will be difficult since the condition is so rare.

Summary

Toxic epidermal necrolysis occurring in siblings is reported. Viral studies were done in the second case. Familial sensitivity to bacteria or virus is suggested as a possible etiology.

Acknowledgment

The author wishes to acknowledge the assistance of Dr. Jack W. Lukemeyer, Indiana University Medical Center, for the viral studies. Mrs. Nina S. Campbell, of the Indiana University Medical Center Library, also provided invaluable help in searching the literature.

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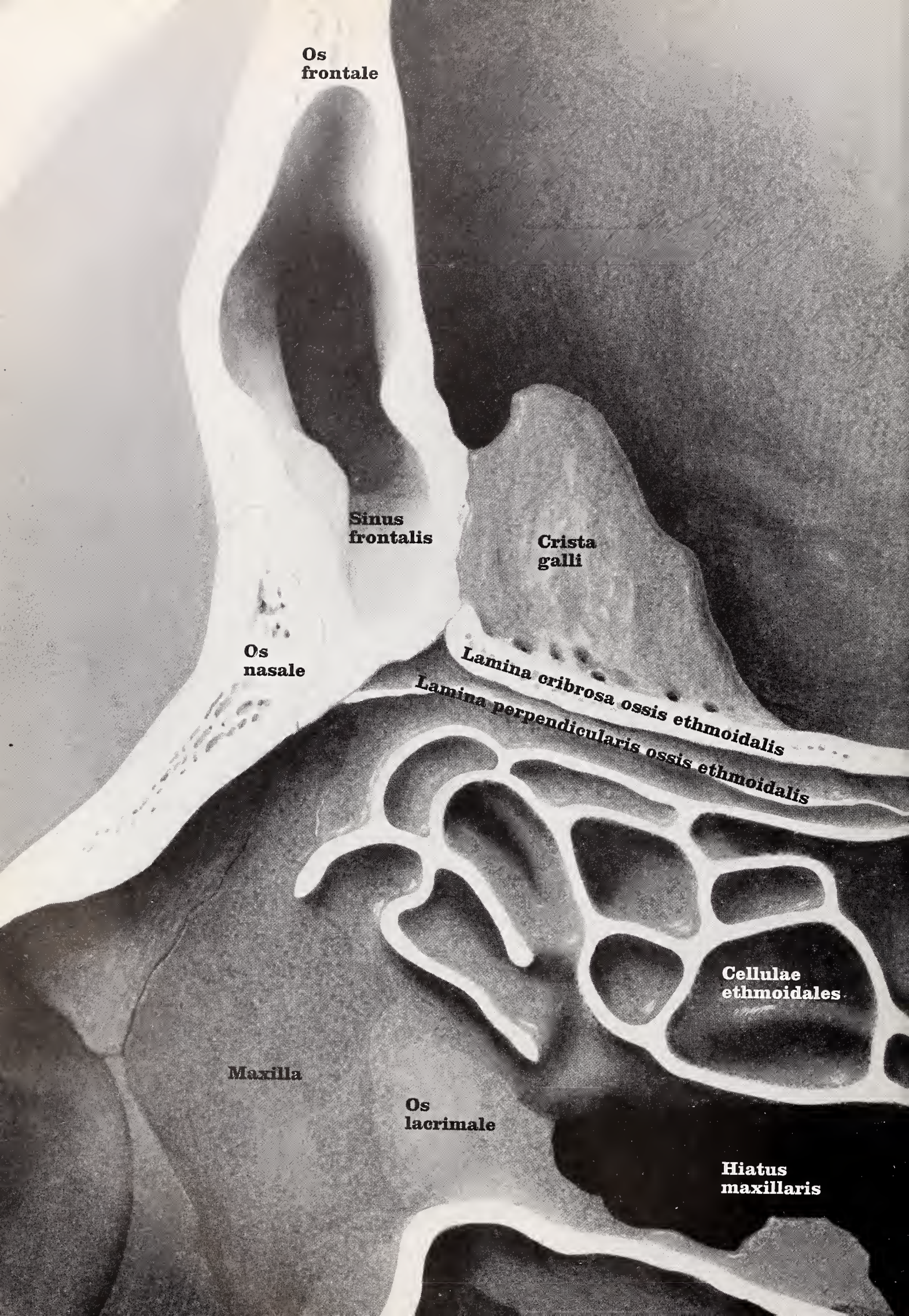
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Os
frontale
Sinus
frontalis
Crista
galli
Os
nasale
Lamina cribrosa ossis ethmoidalis
Lamina perpendicularis ossis ethmoidalis
Cellulae
ethmoidales
Maxilla
Os
lacrimale
Hiatus
maxillaris

Sinus headache is not a single entity, but a chain reaction of pain. It is facial pain—deep, dull, aching and nonpulsating. It is referred pain—originating in the nose and sinuses but felt at another site. It may become generalized pain and tension in head and neck. It is one or all of these.

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Side Effects: Epigastric distress, drowsiness, dizziness, insomnia and nervousness.

Precautions: Instruct patients not to drive or operate machinery if drowsiness occurs. Use with caution in patients with thyroid disease, heart disease, hypertension, diabetes or kidney disease. Excessive dosage or prolonged use may cause kidney damage.

Dosage: Adults—2 tablets every 4 hours.

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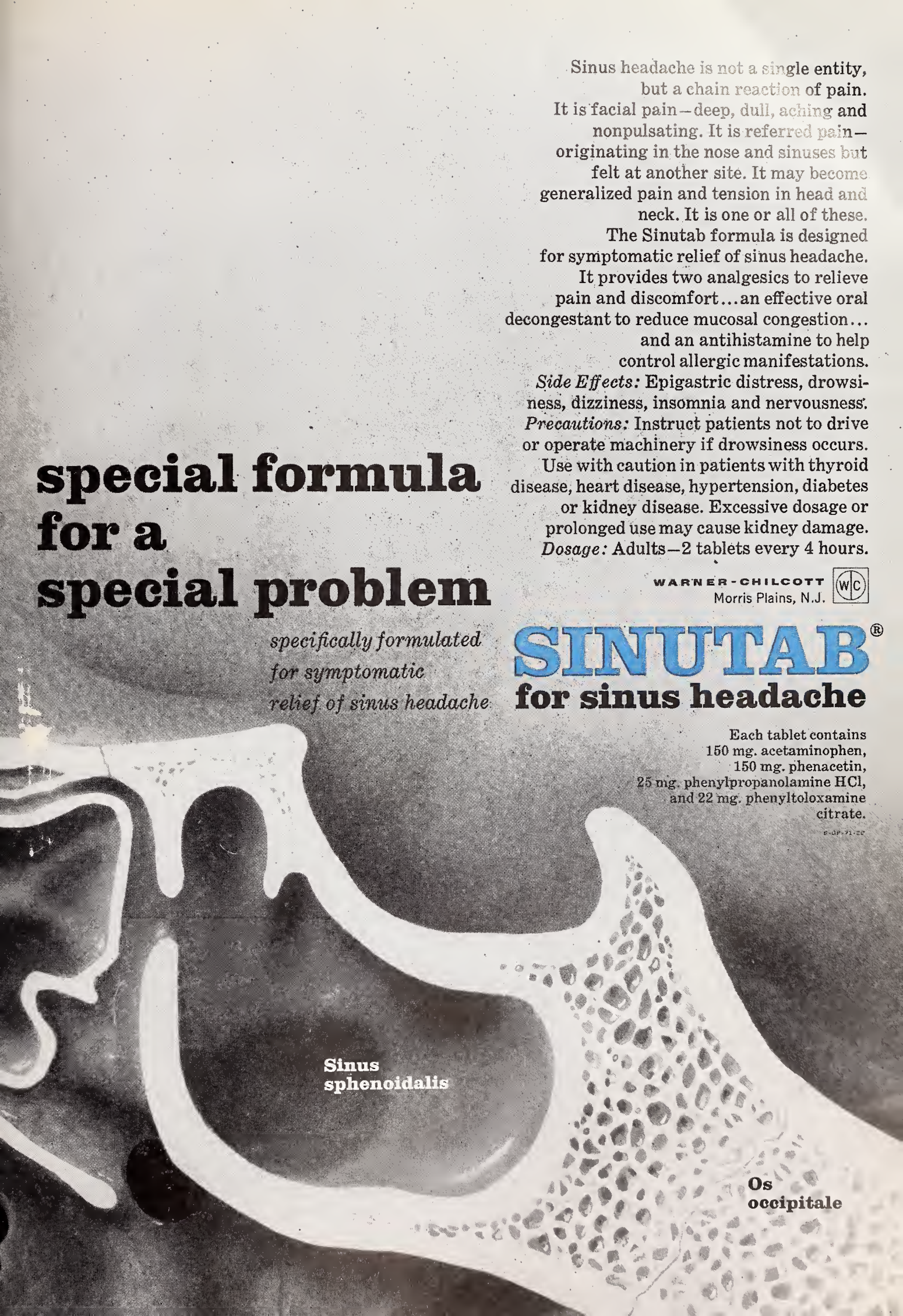
special formula for a special problem

specifically formulated for symptomatic relief of sinus headache

SINUTAB®
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Each tablet contains 150 mg. acetaminophen, 150 mg. phenacetin, 25 mg. phenylpropanolamine HCl, and 22 mg. phenyltoloxamine citrate.

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A report of a severe peritonsillar reaction occurring in a highly allergic child. When the illness became complicated by respiratory obstruction, tracheotomy was considered but postponed while therapy by steroids and massive doses of penicillin was tried. Prompt recovery was possibly due to control of subglottic allergic edema by steroids.

Peritonsillar Cellulitis

Report of a Case

C. K. NEWSOME, M.D.
Evansville

THIS is a report of what was probably a case of peritonsillar cellulitis. It is unusual in that it occurred in such a young infant. Severe respiratory symptoms suggest the coincidence of subglottic edema. The condition responded promptly to antibiotic therapy and steroids and subsided without abscess formation.

Case Report

The patient, a three-month-old Negro female, of impoverished parents, had suffered repeatedly from severe allergies, including "colic" and eczema. Numerous members of the family had also suffered from allergic disease. For three days prior to admission to the hospital, I had treated the child at home with a broad spectrum antibiotic for an upper respiratory infection. She failed to improve and was brought to the emergency room of the hospital because of a "stiff neck."

The infant was hyperirritable, but in no apparent distress. Severe dermatitis, either allergic or seborrheic, was present on the scalp. On examination there was no neck stiffness. The ear canals were encrusted, but without exudate; the conjunctivae were inflamed; pus exuded from the left eye. Discrete erythematous lesions were present on the back and abdomen.

The infant was placed on a soybean formula and treated locally for the lesions on the skin, scalp, eyes and ears. Erythromycin was ordered and epinephrine for wheezing. A decongestive analgesic containing acetaminophen was given for the running nose. Over the next three days the child improved moderately. On the evening of the third day the child developed acute difficulty in breathing with substernal retraction. She was immediately given dexamethasone plus epinephrine.

Examination that evening revealed massive swelling involving the area of the right tonsil and surrounding portions of the right pharynx. The swelling was brawny and indurated without evidence of localized pus formation. Pain was difficult to assess since the child was in such respiratory distress. A diagnosis of acute right peritonsillar cellulitis was made, confirmed later by Dr. Joseph Begley, an ENT specialist. In view of the pronounced respiratory distress, tracheotomy was considered. The decision was reached to use an antibiotic overnight in the hope that the necessity of the operation could be avoided. The child was watched closely in case the obstruction became severe enough to endanger life.

Massive doses of an aqueous penicillin preparation were ordered. Improvement began in about six hours and was progressive. One week later, the infant was discharged from the hospital. At the time of the acute episode, urinary findings were not positive, the hemoglobin was 9.6 gms., hematocrit 30, red cell count was 4,444,000, white cell count 14,600, with 44 polymorphonuclears, 50 lymphocytes, and five monos.

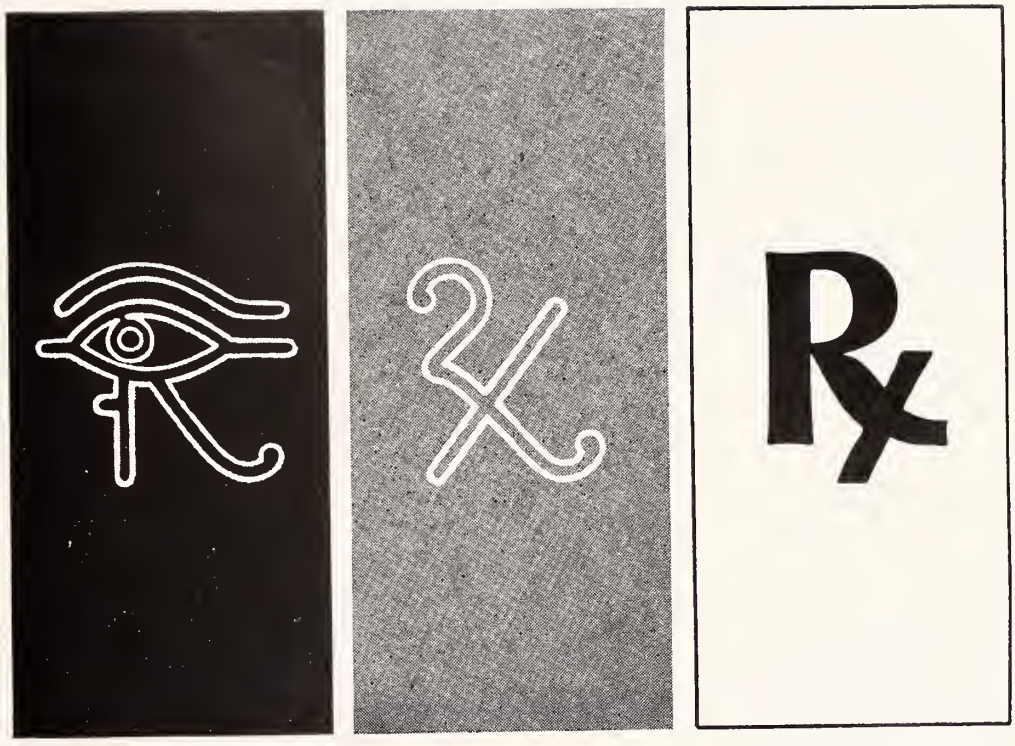
Although nose and throat cultures on admission to the hospital might have been useful. they probably would have shown little since the baby had received antibiotics before admission.

Comment

At the suggestion of Dr. Harry C. Shirkey, the old pediatrics literature was examined. There was no mention of peritonsillar cellulitis. but, quite interestingly, there was a description in an early pediatric text of "erysipelas of the pharynx" causing extreme distress in breathing and necessitating tracheotomy. Since peritonsillar cellulitis rarely causes respiratory obstruction, the possibility of subglottic edema must be considered, particularly since the patient had a strong allergic history. A therapeutic test with steroids for children with "croup" who do not show x-ray signs of retropharyngeal abscess is logical. I am advised that on one teaching service, at least, many such patients respond immediately and do not require tracheotomy, a procedure which was common on the service before steroids were used for suspected subglottic edema.

As Dr. Begley has pointed out, patients with laryngotracheobronchitis often have, as part of the syndrome, an edema that responds quickly to steroids. ◄

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Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

"...quite apart from the problem of vascular damage, there arises a possibility of virtual 'cure' or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive."

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: Drugs of Choice 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension. **Dosages:** Usual dose is 1 tablet twice daily, at morning and evening meals. However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and precautions:** The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

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Electrocardiogram
of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Ventricular Parasystole and A-V Nodal Rhythm

CHARLES FISCH, M.D.
Indianapolis

UNUSUAL arrhythmias may be encountered during anesthesia, especially in patients with heart disease who have been treated with digitalis. Such an example is presented in Figure 1, obtained during cholecystectomy in a 45-year-old man who suffered two previous myocardial infarctions. The control strip demonstrates sinus bradycardia at a rate of 50. Beginning with the second row, aberrant ventricular complexes are recorded. Their rate of 60 exceeds the discharge rate of the S-A node (50) and the complexes are not preceded by P waves. This rhythm is one of ventricular parasystole or (?) slow ventricular tachycardia. The seventh QRS is preceded by a P wave, its contour is intermediary between idioventricular QRS and the S-A complex and represents a fusion beat. The remainder of the strip is one of S-A rhythm.

The third row illustrates QRS complexes normal in appearance but lacking P waves; their rate is 43. This is an A-V nodal rhythm. The S-A rate was either suppressed below 43, allowing the A-V node to take over, or the S-A node was simply arrested. Following administration of atropine (bottom row) and blocking of the vagal inhibition of the S-A node, the S-A rhythm was once again re-established.

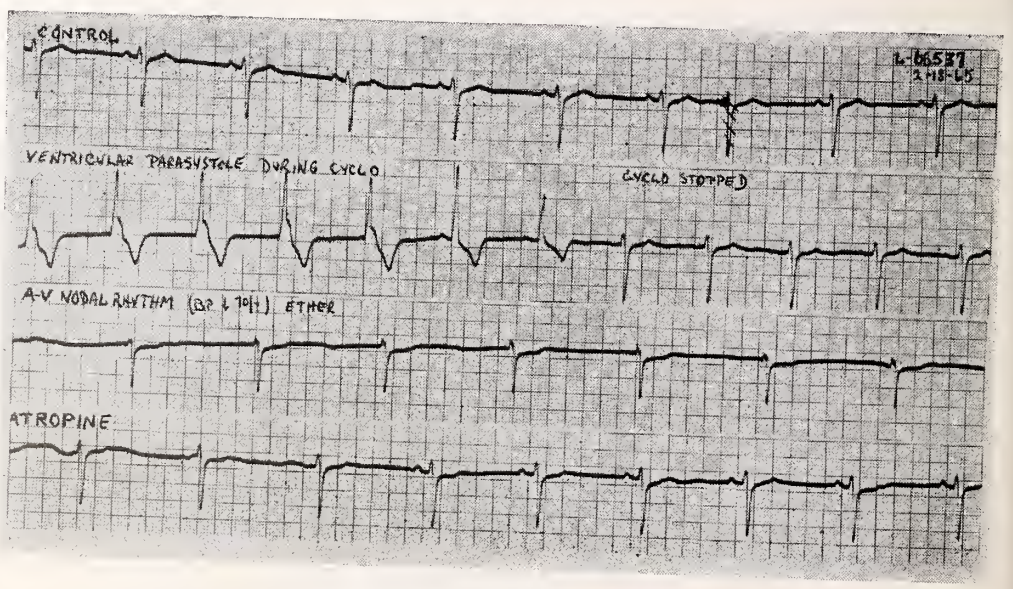


FIGURE 1

AN example of an unusual arrhythmia encountered during anesthesia.

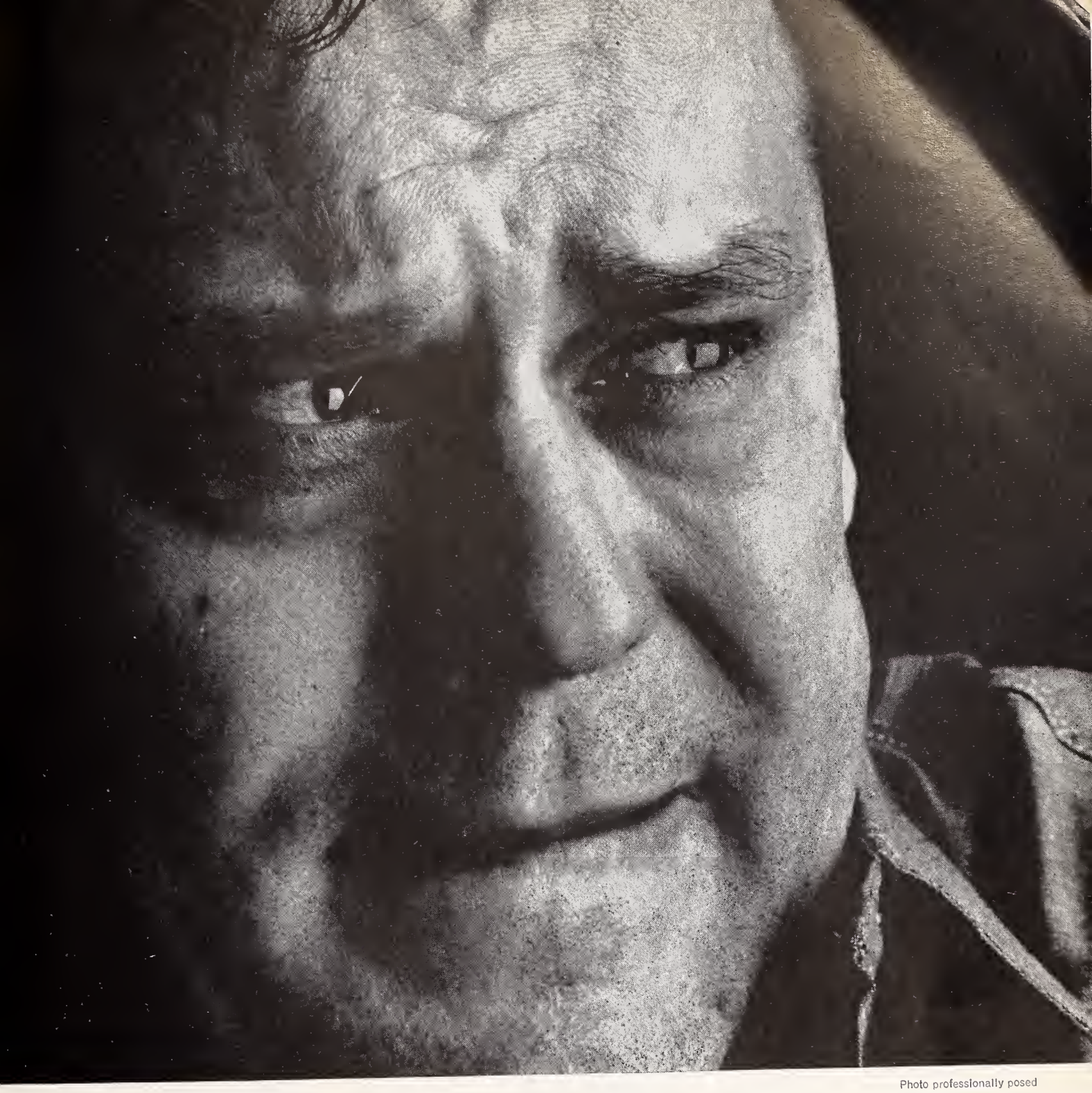


Photo professionally posed

Mike expects a penicillin injection. He's about to be pleasantly surprised.

His physician is going to prescribe an oral penicillin —Pen•Vee® K (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

Indications: Infections due to pathogens susceptible to oral penicillin G. Prophylaxis of rheumatic fever in patients with previous history of the disease.

Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available: epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; antihistamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Composition: Tablets—125 mg. (200,000 units) and 250 mg., (400,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

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X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Morgagni Hernia

ERICH K. LANG, M.D.
*Indianapolis**

AN 80-year-old white male was admitted for recurrent thrombophlebitis and cachexia. A silent neoplasm was suspected and a general workup was initiated.

The pertinent history revealed recurrent ill-defined chest pain, reminiscent of the hiatus hernia complex or possible coronary artery disease.

Physical examination and laboratory examinations were unremarkable apart from a mass in the right cardiophrenic angle, demonstrated on chest roentgenograms. The demonstration of this anterior mass and a history suggestive of a hiatus hernia raised the question of a possible incarceration of omentum in a Morgagni hernia.

Three hundred ccs of air were introduced into the peritoneal cavity and allowed to gravitate upward with the patient in the erect position. Subsequent roentgenograms (Figure 1) demonstrated a sickle-shaped air collection in the apex of the described mass in the right cardiophrenic angle, ascertaining the presence of a communication with the peritoneal cavity. It was felt that this indeed represented a classical Morgagni hernia with omentum as contents. Surgical correction was contemplated, however, the patient succumbed to a fulminating infection. Autopsy confirmed the presence of the hernia; the omentum apparently had herniated into the base.

* Radiologist, Methodist Hospital, Indianapolis.

Discussion

Morgagni hernias are infrequently seen. The clinical symptomatology closely mimicks that of a hiatus hernia or coronary infarct. The diagnosis is usually suggested on chest roentgenograms and can be confirmed by intraperitoneal gas studies allowing air to gravitate through the open foramen of Morgagni into the hernia sac.

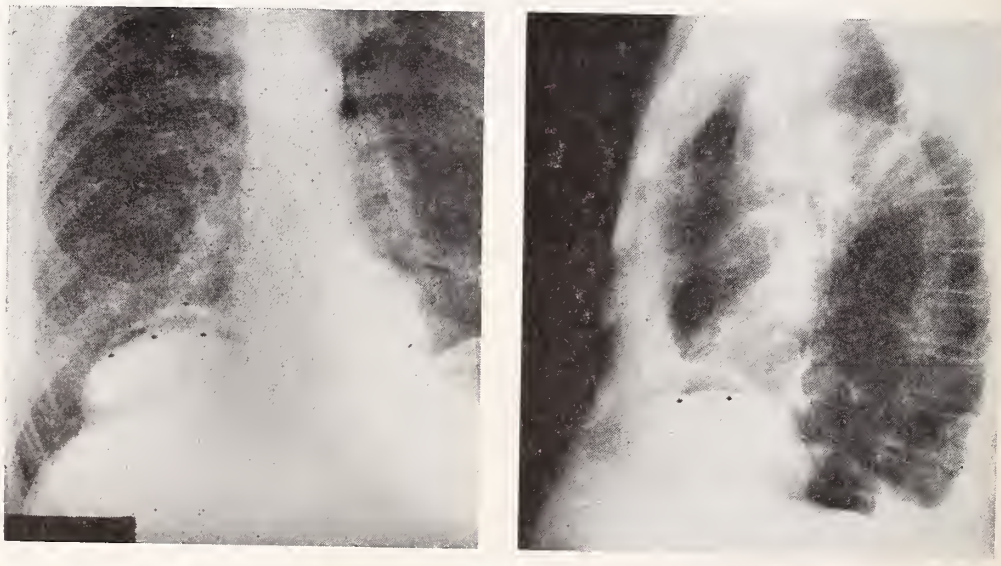


FIGURE 1

AN AP and lateral chest roentgenogram reveal a spherical mass in the right cardiophrenic angle. A sickle-shaped air shadow is seen in the dome of this spherical mass. Air had been introduced into the peritoneal cavity and allowed to ascend through the foramen of Morgagni into the hernia. The relatively homogeneous content in the foramen of Morgagni suggests the presence of omentum rather than bowel loops, which would tend to show air-fluid levels.

New from Du Pont

Symmetrel®

(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

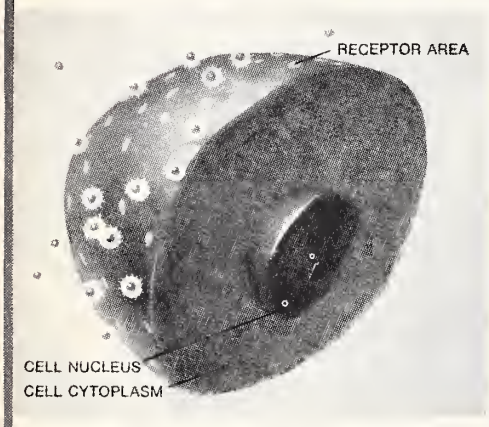
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

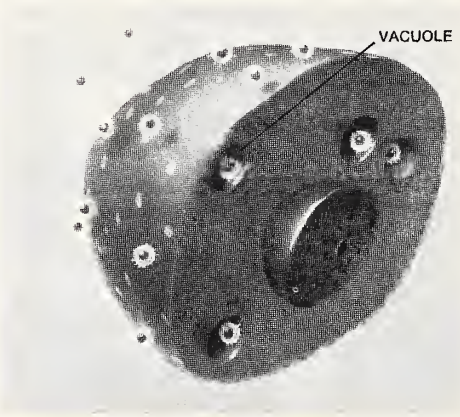
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

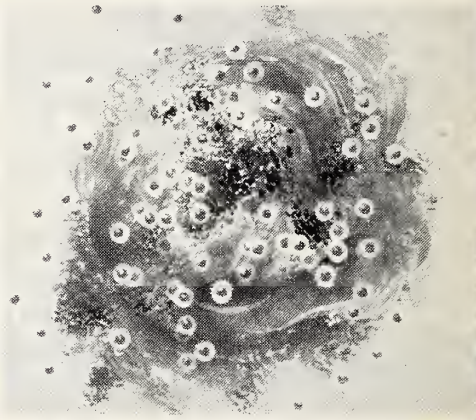
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

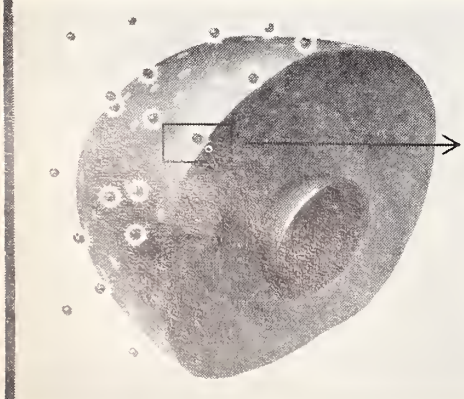


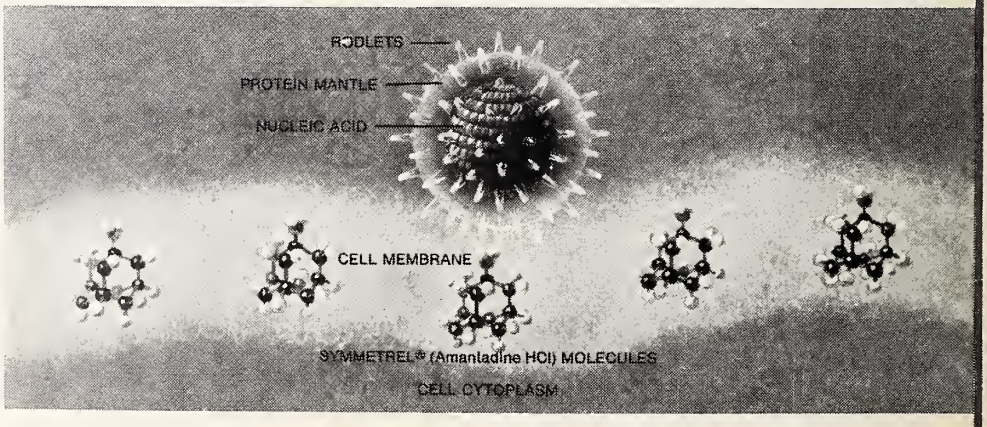
2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]





Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

DUPONT

Symmetrel®

(Amantadine HCl)

A molecular barrier to virus penetration

arrest diarrhea

in • gastroenteritis • acute infections



LOMOTIL®

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride . . . . . 2.5 mg.

(Warning: May be habit forming)

atropine sulfate . . . . . 0.025 mg.

Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- **Ulcerative colitis**
- **Acute infections**
- **Irritable bowel**
- **Regional enteritis**
- **Drug therapy**
- **Food Poisoning**
- **Functional hypermotility**
- **Malabsorption syndrome**
- **Ileostomy**
- **Gastroenteritis and colitis**

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg.	½ tsp. 3 times daily
6-12 months	4 mg.	½ tsp. 4 times daily
1-2 years	5 mg.	½ tsp. 5 times daily
2-5 years	6 mg.	1 tsp. 3 times daily
5-8 years	8 mg.	1 tsp. 4 times daily
8-12 years	10 mg.	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

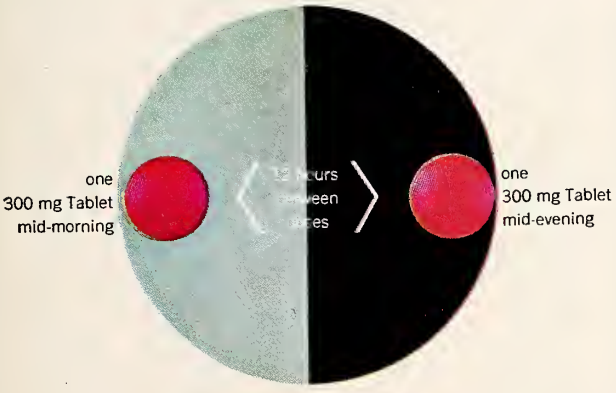
Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.



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when you know

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
is effective b.i.d.



It's made for b.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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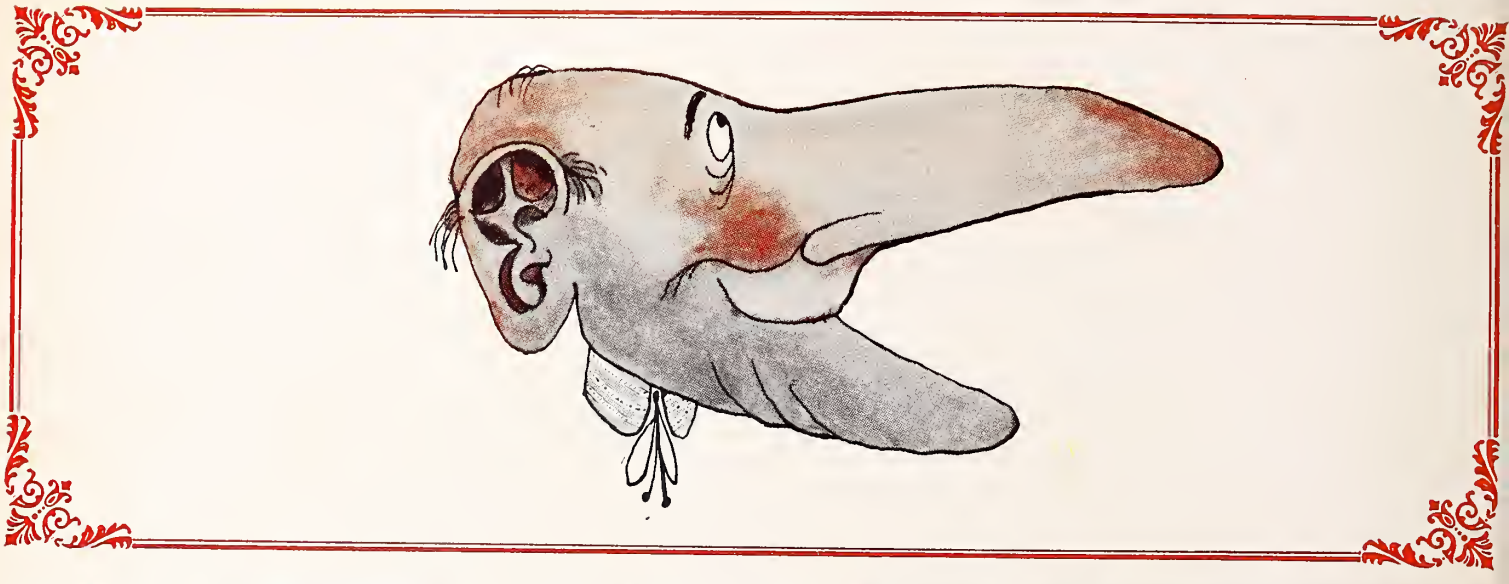
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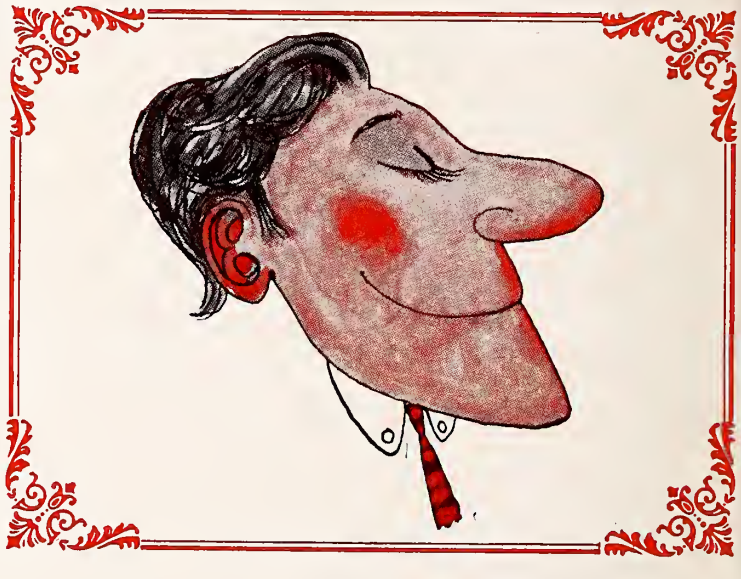
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■ quickly relieves congested nose
■ action is gentle, yet prolonged
■ side effects are minimal

INDICATION: Nasal congestion. CONTRAINDICATION: Do not use in patients sensitive to small doses of sympathomimetic substances. WARNINGS: Prolonged or excessive use may cause rebound congestion. Use cautiously in patients with hyperthyroidism, coronary artery disease, hypertension, and diabetes. CAUTION: Do not shake Nasal Spray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water after each use. No more than one person should use the same dropper bottle or nasal spray.
SIDE EFFECTS: Occasional local reactions: rebound congestion, slight burning or stinging, sneezing, dry nose. Occasional systemic effects: headache, drowsiness, lightheadedness, insomnia, palpitations. Overdosage in young children may produce profound sedation.
DOSAGE: **Adults:** *Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. *Nasal Spray*—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. **Children under 12:** *Pediatric Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used in infants under 6 months. *Pediatric Nasal Spray*—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. SUPPLIED: OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) *Nasal Solution*, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. *Nasal Spray*, 0.1%; plastic squeeze tubes of 15 ml. *Pediatric Nasal Solution*, 0.05%; dropper bottles of 1 fluidounce. *Pediatric Nasal Spray*, 0.05%; plastic squeeze tubes of 15 ml. *Nasal Solutions* contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. *Nasal Sprays* contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. *Consult complete literature before prescribing.*
CIBA Pharmaceutical Company, Summit, N. J.

C I B A

2/3329 MKL-1

ASTHMA:

IMMUNOLOGICAL AND NON-IMMUNOLOGICAL

One of a series of case reports illustrating the differential diagnosis in patients with symptoms of asthma

IRVIN CAPLIN, M.D.
JOHN T. HAYNES, M.D.
Indianapolis

A seven-year-old boy was seen because of hay fever of two years duration. The third year of his ragweed hay fever was complicated by the development of asthma. He was given Quibron, a preparation which contains both theophyllin and guaiacol. The medication produced wretching and an alarming increase in his dyspnea. He was hospitalized because of the severe dyspnea.

Physical examination revealed distended neck veins, some cyanosis and mild asthma. Hamman's sign (crunching sound synchronous with the heart beat) was present on cardiac auscultation. A chest x-ray (Figure 1) revealed a pneumopericardium and pneumomediastinum. Because of his severe respiratory state and the evidence of obstruction to his venous return (distended neck veins), preparations were made to aspirate air from the suprasternal notch. The patient said that his breathing was suddenly easier, which indeed it was. His neck veins were no longer distended and air could now be palpated subcutaneously in the neck and over the anterior chest.



FIGURE 1
PNEUMOPERICARDIUM and pneumomediastinum are demonstrated.

This patient represents an infrequent, but not rare, complication of asthma. The escape of air into the subcutaneous tissue is a good sign and indicates an escape valve is present for the air that had been trapped in the mediastinum. ◄

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Devoted to the interests of the medical profession of Indiana

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More Hospital Beds

THE Veterans Administration reports that its program of providing more nursing-home-care-type beds has released thousands of beds for treatment of veterans with acute disabilities.

The three-point nursing home care program has made available an additional 1.37 million bed days of hospital care. This has been accomplished by providing nursing home care type facilities for patients who have received maximum hospital benefits but still require skilled nursing care.

The three-point program includes (1) the creation and operation of 4,000 nursing home care beds within the 165 VA hospitals; (2) authorization for the VA to place veterans in private nursing homes; and (3) a grant-in-aid program to help states build and operate nursing home care facilities for veterans.

The VA now has 2,614 home care beds in operation in 42 VA hospitals. It is expected that all 4,000 of the authorized beds will be in operation within six months. The VA also has agreements to provide care in 1,913 private nursing homes with a capacity of 129,490 patients.

Five states have received approval for construction of nursing care facilities in state homes for veterans to provide 614 nursing home care beds, and an additional five states have applications pending for construction which will provide 430 similar beds. Thirteen other states have expressed interest.

The VA program is not only clearing hospital facilities for patients who require hospital care, but is said to be elevating standards for private nursing homes, through consultation with VA personnel and because of inspection and advisory services which the VA is providing the private homes in the program.

PHS Warns About Motorcycles

THE Public Health Service is calling attention to the national health problem inherent in the operation of motorcycles and has written a book about it.

"The death rate for motorcycle accidents, in relation to the number of motorcycles in this country, is twice as high as the comparable rate for automobiles and other motor vehicles."

There are now more than 1.5 million cycles registered in the U. S., and the expectation is that there will be one million more by 1970.

Lack of adequate driver training, failure to wear safety helmets and goggles, lack of safety equipment on the cycles and failure of other vehicles to share the roadway are all contributory factors to the grisly accident record.

Lack of training is emphasized by one report which found that in one series 20% of the injured persons were riding cycles for the first or second time, and 70% had either rented or borrowed the bike. Motorcycles may be rented, the only requirement being an auto driver's license.

Only a few states have laws relating to training and special licenses for motorcycle operators, and even fewer states have laws in regard to safety helmets. Studies have shown that fatalities are reduced to one-third by the wearing of a proper helmet.

The U. S. Air Force has required motorcyclists on air bases to wear helmets for several years and several cities require their use.

Free copies of the booklet "Motorcycles in the United States" may be obtained by writing Community Services Branch, Division of Accident Prevention, Public Health Service, 800 N. Quincy St., Tower Bldg., Arlington, Virginia 22203. ◄

President's Page

Dear Doctor:

By the time you read this the new year will have begun and many of your resolutions may have been broken. I should like to quote from Napoleon Hill "Yesterday has gone forever! Tomorrow will never arrive, but today is yesterday's tomorrow within your reach. What are you going to do with it?"

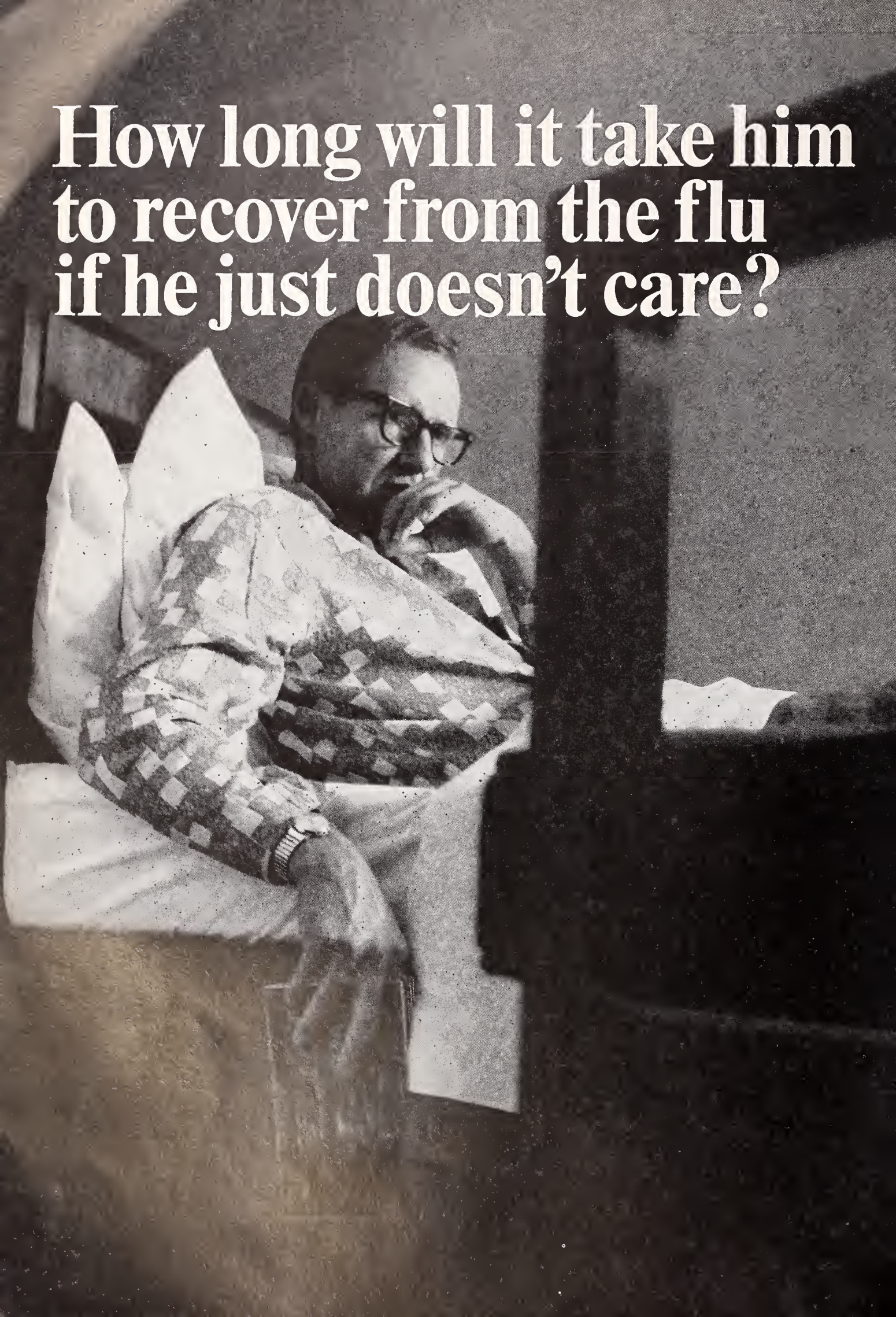


What we do with this next year is up to you and me. Each of us should make one resolution and reaffirm our stand for better patient care. If each of us within our practice would work hard for improved patient care, patient care in Indiana would be outstanding. Our problem throughout the year will be to try to coordinate the new governmental programs with good sound medical judgment. At the time this is printed the legislature will be in full swing. I would request that each of you contact your state senators and representatives urging them to follow the advice of the Indiana State Medical Association concerning implementation of Title XIX and other health proposals.

If we can sit with the legislature and formulate for Indiana a good program under Title XIX, we will have less of the difficulties that have arisen with medicare and the welfare department. It seems to me that the paramount challenge for the Indiana State Medical Association for the year 1967 is to do its best to properly implement Title XIX in Indiana. While to most of us this is unpleasant, nevertheless it is the law. It is our duty to ourselves, to our patients and to our nation and our state to make implementation in Indiana as workable as is possible within the law for all concerned.

May you and yours have an excellent new year. May the challenges which shall surely confront us all goad us to excel in our professional work. Let us decide what we are going to do with 1967. Let us understand the challenges of 1967. Let us meet those challenges with responsibility and eagerness of such devoted magnitude as to cause them to be stepping stones for the better.

Eugene S. Kiefer M.D.


How long will it take him
to recover from the flu
if he just doesn't care?

Does he really care? Is he alert, encouraged, positive and optimistic about getting out of bed and back to work soon?

Or is he giving in to the depressing impact of confinement?

When functional fatigue complicates convalescence, Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

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Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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The Woman's Auxiliary

REPORTS TO ISMA

October and the state convention at French Lick marked the midway point in your auxiliary's year. Those officers, chairmen and members who attended the work and play sessions at that time felt repaid, I'm sure. Interest and enthusiasm were running high and good fellowship was evident everywhere. Our only regret was that every auxiliary was not represented.



By the time this goes to print the first television series on Medical Self-Help will have been presented by Station WTTV-TV, Channel 4, Indianapolis. We trust that those auxiliaries within the viewing area were able to organize a great many groups to view the series of 15 films. This cooperative project of the State Board of Health, Purdue University, your association and its auxiliary could be the beginning of far-reaching strides toward better health in Indiana, especially when disaster strikes.

One month of the New Year is almost behind us. It is not too early to remind you of the annual meeting of our House of Delegates which will be held in Evansville at the new Ramada Inn, April 18, 19 and 20. Please convey this reminder to your wives and help them plan to attend. The members of Vanderburgh-Southwestern have already been working for many weeks in order to give the members of our Indiana auxiliary an enjoyable and memorable visit in their River City.

Mazo D. Scales

Who Said This?

(One of a series prepared by Blue Shield)

Below is a quotation from a talk by an Indiana physician. Read what was said, and see if you can identify the physician. Also, when did he speak, and where?

"The Council, in compliance with the direction of the last meeting of the House of Delegates, has studied, adopted, and presents for your final approval a definite plan on the indemnity type of the mutual form for an insurance organization for the State of Indiana. It seems that this is the time for decision. All about us the other states have organized and have in action, or are in the process of organizing, these companies of various types, all of which have the same ultimate aim that is, of meeting an overwhelming public demand for avoidance of the cost of catastrophic illnesses among the people who are less able to take care of it. We have no concern with the well-to-do people. They have always been, and will continue, able to afford such care and pay such rates as may be fair.

"It is for these people who are above the indigent class, the men of low incomes, who complain that they cannot have the things that we have taught them they ought to have. We are partly to blame for this. We have insisted, day in and out, that there are certain standards of medical care every man ought to have. We have insisted that if all people could have this we could raise the standards of health in the United States to unprecedented heights, and we have sold our people thoroughly. With their firm belief in our knowledge of the subject, they have taken it literally, much more literally perhaps than we really intended, because we know that medical care itself is not the sole factor; that the questions of housing, clothing, food, and amusement enter into the health question as well.

"But our people do not know that; they are sold on the medical thing, and they demand it. They say, 'You have told us that we need this special care,' and since health is a personal thing to everyone, they want the best, and yet they find themselves unable to meet the constantly mounting costs thereof. Few men are unable to pay for the minor things; it is the major things that put them deeply in debt that make it difficult, and they often are restrained from having care that they believe they ought to have; and possibly they are right, but because they are unable to finance it they demand that it be given to them.

"The natural place to look for it is from the medical profession, and they say to us: 'Give it to us, make it possible to have these things that you say and that we believe are necessary for our general welfare; and if you won't give them to us, there is always a place we can go where we will get these things, and that is the limitless resources of the national treasury.' As a result of this a tremendous demand has been built up. You are all aware of it. We are simply fighting now to protect those things that we hold valuable. We know what it means to have compulsory health insurance, but we cannot sell the people on that. They look upon any type of medical service as inherently and naturally of the highest type. They cannot understand what it means when it gets upon a grossly commercial basis of multiple work for relatively small fees — what it means to them. When they find it out it will be too late, because if any of these measures go on the statute books they will never come off. So we are fighting not only for the future good of the people whom we profess to serve, but for the maintenance of these standards that we ourselves have set up and that we believe in. We are doing it partly for the good of the people and partly for the perservation of our own economic status and for maintenance of our own medical standards."

The quotation is from a report made by W. U. Kennedy, M.D., New Castle, on January 27, 1946, at a special meeting of the House of Delegates of the Indiana State Medical Association, when approval was given to establish the Indiana Blue Shield Plan. Wouldn't you agree that Doctor Kennedy's remarks are just as significant and true today as they were then? ◄

W. C. Huddlestone
Communications Division

Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

When to Advise Total Colectomy for Ulcerative Colitis?

The long-term prognosis of ulcerative colitis has been very difficult to determine, yet it can be of extreme importance in attempting to evaluate the advisability of surgery in a given patient. Watts et al.[1] present a survey of 465 patients with ulcerative colitis whom they followed from 1952 to 1963. Unfortunately, the seemingly most simple means of assessing future prognosis by correlating it with the severity of the initial attack was open to serious error. They were therefore forced to conclude that the initial severity and extent of the disease gave a poor guide as to the ultimate outcome. Frequency of recurrence of symptoms and degree of involvement at the time of recurrences, however, correlated much better with the eventual outcome. The author's other conclusion was that once total large bowel involvement could be demonstrated, elective proctocolectomy should be performed because this group of patients had a far higher mortality rate than the other patients.

British as Uncertain on LSD as We Are

The British seem to be muddling along in roughly the same degree of insecurity and ignorance as we are regarding the use of LSD. In an editorial,[2] a number of untoward and tragic reactions to LSD are cited. The same article admits that this compound, and other psychedelic agents, may have some beneficial therapeutic effects that have not been soundly documented at this time. The article again describes these compounds as being non-addictive, and this seems to be agreed upon by all authorities. It appears as if the British will attempt to restrict its use to qualified investigators much as has been our approach. The other remarkable thing concerning this article is that they somehow managed to write it without a single reference to Timothy Leary.

Most Acute Low Back Miseries Arise Without Apparent Cause

A study on acute low back syndrome is presented by Dillane, Fry, and Kalton[3] which was derived from a typical general practice office. This study encompassed 605 attacks of backache over a four-year period. The significance of this condition becomes apparent when you consider that this means that 7.5% of the physicians' patients had an attack during this time. Of interest to those in industrial medicine is the fact that only 11% of the males and four percent of the females had suffered any acute back strain as a precipitating episode. Ninety percent of the episodes responded well to conservative management by a general practitioner. The patients were incapacitated less than two weeks in roughly two-thirds of the cases. Once a patient experienced one such episode, however, he stood a 45% chance of a recurrence within the next four years.

Electrocution for Enuresis not Satisfactory

Nocturnal enuresis is disturbing to the patient, parents, and physician. Since most cases are refractory to treatment, the parents often purchase one of the electrical buzzer alarm devices that are intended to awaken the child if enuresis occurs. Borrie and Fenton[4] report two children who received rather nasty electrical burns which developed into frank ulcers from these devices. These burns can result when the battery on a buzzer system is not working properly to awaken the patient. The authors believe that these devices should be altered to protect against this hazard.

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Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

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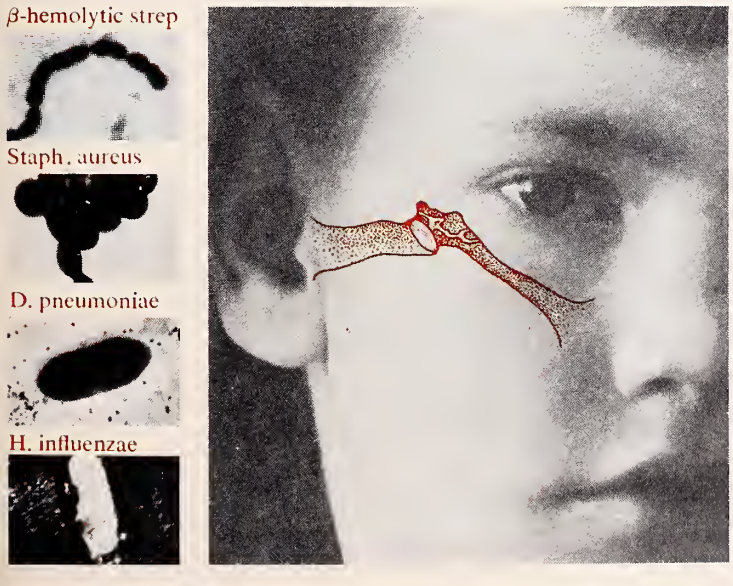

It's easy
for children to get
otitis media...

and Gantanol Suspension is a good way to help them get well

proven effectiveness against major U.R.I. pathogens including beta-hemolytic strep

With Gantanol (sulfamethoxazole), bacteriologic conversion rates for beta-hemolytic streptococci are comparable to those generally seen with penicillin, and apparently superior to those cited in the literature for erythromycin and the broad-spectrum antibiotics.[1,2] With conversion rates ranging from a high of 96% in 229 patients[2] and 98% in 96 cases[3] to 65% in 105 cases,[5,6] Gantanol (sulfamethoxazole) Suspension is an effective alternative therapy in patients sensitive to penicillin, the drug of choice in known beta-hemolytic streptococcal infections.

In addition to this effectiveness against beta-hemolytic streptococci,[1-9] bacteriologic conversion rates have averaged 69% for *D. pneumoniae* (103 of 150 patients),[3,6,7] 78% for *H. influenzae* (42 of 54 patients),[3,4,7] and 67% for *Staph. aureus* (76 of 113 patients).[3,4,6,7] It is this wide spectrum of activity which makes Gantanol (sulfamethoxazole) Suspension a good choice in acute pharyngitis, tonsillitis and otitis media.



therapy generally uncomplicated by side effects

Over 8 out of 10 U.R.I. patients—87% of 2231 patients—showed an excellent to satisfactory clinical response to Gantanol (sulfamethoxazole).[1-13] Such favorable results are even more meaningful in view of the fact that only 1.1% of the more than 2000 cases cited discontinued therapy because of side effects. Of the total side effects reported (4.6%), most were mild and included rash, urticaria, itching, dizziness, headache, diarrhea, nausea and vomiting, shivering sensation, skin discoloration and crystalluria.[1-13]

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute and chronic respiratory and urinary tract bacterial infections due to susceptible microorganisms. At present penicillin is considered the drug of choice in acute group A beta-hemolytic streptococcal infections; however, Gantanol (sulfamethoxazole) has shown an effectiveness approaching that of penicillin in a large number of patients. If employed in such infections, *it is important that therapy be continued in the usual recommended dosage for a period of at least 10 days.*

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants or infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed. Data insufficient on prolonged or recurrent therapy in chronic renal diseases of children.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Following may occur: headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Dosage: Children—1 teasp./20 lbs initially, followed by ½ teasp./20 lbs b.i.d. *Adults*—4 teasp. initially, followed by 2 teasp. b.i.d. or t.i.d., depending upon severity of infection.

How Supplied: Suspension 10%, 0.5 Gm sulfamethoxazole/5 cc teasp., cherry-flavored, bottles of 16 oz.

References: 1. Braden, B.; Colmore, J. P., and Cummings, M. M.: Antimicrobial Agents Annual—1960, p. 54. 2. Alban, J.: *Am. J. Dis. Child., 109*:304, 1965. 3. Elia, J. C.: *Eye Ear Nose & Throat Month., 41*:722, 1962. 4. Carter, C. H.: *Clin. Med., 71*:1571, 1964. 5. Jackson, H.; Cooper, J.; Mellinger, W. J., and Olsen, A. R.: *Southwestern Med., 44*:246, 1963. 6. Reichelderfer, T. E.: *Clin. Med., 71*:1045, 1964. 7. Peters, J. H.: Scientific Exhibit presented at the Spring Meeting of the American Academy of Pediatrics, April 26-29, 1965. 8. Peters, J. H.: Antimicrobial Agents and Chemotherapy—1961, p. 406. 9. Braden, B., and Colmore, J. P.: *J. Oklahoma M. A., 57*:7, 1964. 10. Chastain, P. J.: *J. Florida M. A., 48*:816, 1962. 11. Grater, W. C.: *Antibiotics & Chemother., 12*:450, 1962. 12. Exline, A. L.: *Colorado GP, 5*:(5), 11, 1963. 13. Patton, J. M.: *West. Med., 5*:46, 1964.

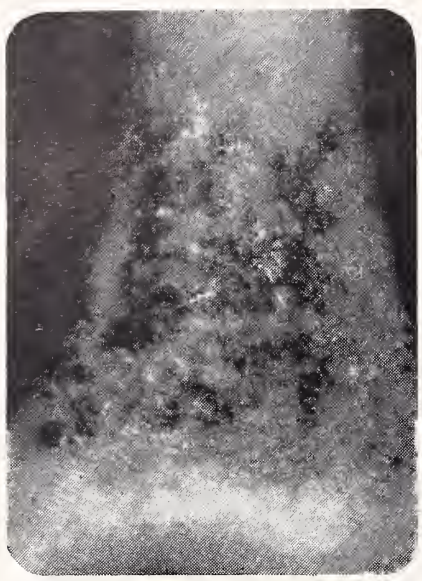
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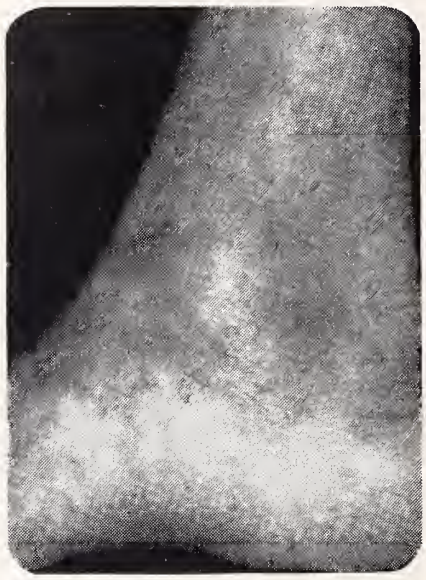
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Annual Meeting Dates of Professional Medical and Allied Organizations

AMERICAN MEDICAL ASSOCIATION ANNUAL CONVENTION
Date June 18-22, 1967
Place Atlantic City, Ga.

NORTHERN INDIANA PSYCHIATRIC SOCIETY
Date Fourth Wednesday of every month, September through June
Place For location and program, inquire Beatty Memorial Hospital, Westville

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of the month, October through May, excluding December
Place The Athenaeum, Indianapolis

INDIANA STATE DENTAL ASSOCIATION
Date May 14-17, 1967
Place Claypool Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Annual Slide Seminar:
Date April 8, 1967
Place Veterans Administration Hospital, Indianapolis

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date April 7-8, 1967
Place Morris Inn, Notre Dame University, South Bend

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 12-14, 1967
Place Stouffer Inn, Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Date July 18-20, 1967
Place French Lick Sheraton Hotel, French Lick

INDIANA ACADEMY OF GENERAL PRACTICE
Date May 3-4, 1967
Place Murat Temple, Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date Nov. 1-3, 1967
Place French Lick-Sheraton Hotel, French Lick

INDIANA STATE MEDICAL ASSOCIATION CONVENTION
Date October 9-12, 1967
Place Indianapolis

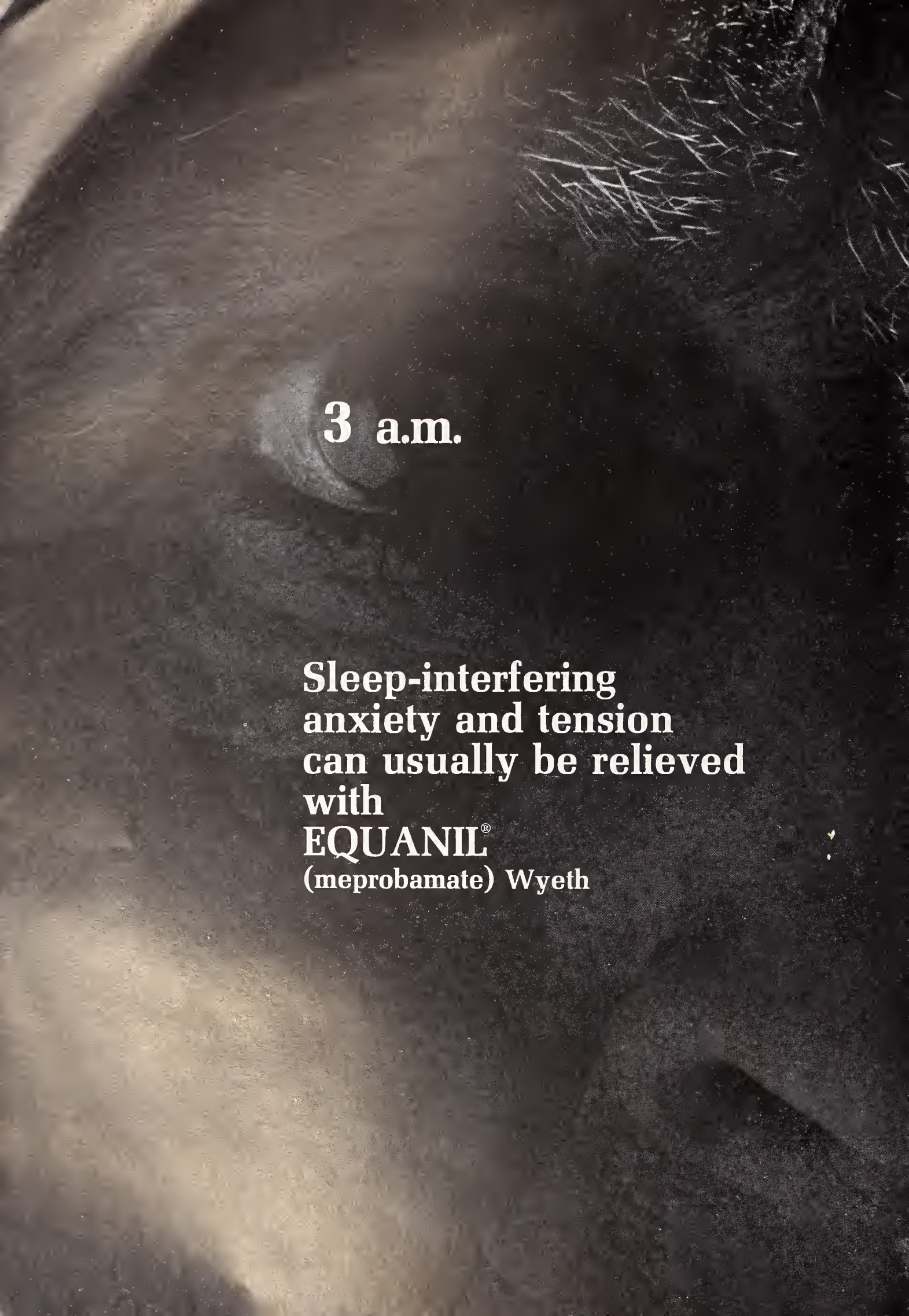
INDIANA PUBLIC HEALTH ASSOCIATION
Date April 25-26, 1967
Place Indianapolis

INDIANA STATE ASSOCIATION OF MEDICAL ASSISTANTS
Date April 28-30, 1967
Place Van Orman-Roberts Hotel, Muncie

INDIANA ROENTGEN SOCIETY
Date May 7, 1967
Place Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Date March 22, 1967
Place Howard Johnson's, 501 W. Washington St., Indianapolis

INDIANA STATE NURSES ASSOCIATION
Date Oct. 12-14, 1967
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A Glimpse Inside Russia

WILLIAM H. NORMAN, M.D.
Indianapolis

AN opportunity to visit Russia, a land of many unknowns, was presented to me in the spring of 1966. I decided it was an experience I could not afford to miss. As a result, I joincd a group of orthopedic and plastic surgeons from North America on September 9 at the Ambassador Hotel in Paris, to begin a "Medical Journey to Samarkand." This journey was organized and sponsored by Dr. A. M. Ingles of Vancouver, Canada and Dr. E. L. Coles of Milwaukee, Wisconsin, with all travel arrangements made through a Montreal and Paris bureau.

Our journey began at the Le Bourget Airport in Paris, when we boarded an Aeroflot TU 104 jet, which flew us over the North and Baltic Seas to Russia. We arrived in Moscow in three and one-half hours at approximately 9:00 p.m., U.S.S.R. time. It was dark, cold and raining when we landed. We waited in an open circular building for some time before any attempt was made by the authorities to contact us. When the custom officers finally arrived, they requested a declaration of our money, including traveler's checks, and we were relieved of one copy of our visa.

Two young English speaking women then appeared. They were our Russian Intourist guides and they accompanied us throughout our trip. We were taken to a new area of the airport, and provided with an excellent dinner at which wine was served. Alcoholic beverages in Russia are vodka (70%), wine, brandy, champagne and beer. The wines are very good, champagne could be bought by the glass and the vodka was drunk straight. The beer was rather sweet and served warm and proved to be the least popular with our group.

Leningrad

After dinner we were taken to another airport, from which we were flown in one and one-half hours to Leningrad. We arrived about midnight at The Russia, a four-year-old hotel, located at the edge of this city of three and one-half million people. Our baggage did not arrive until 2:00 a.m. so it was quite late when we finally made it to bed. After the previous long and tiring day, it seemed I had barely closed my eyes when I was called for breakfast at 9:00 a.m.

After breakfast we were taken on a tour of Leningrad, a city built on many islands. The majority of people live in apartments as they do in Moscow and the other large Russian cities. We visited the Palace Square, the site of the October, 1917, revolution. At noontime we were taken to a public restaurant in the center of the city where a very good meal was served. Borsch soup, caviar, chicken, veal or beef, a vegetable, usually a potato, and a tomato and onion salad proved to be a typical meal throughout our trip.

Menus were standard at the hotels and restaurants and were served without choice. Liquors and wines were purchased individually. When lunch was over our guides gave us a card on which was written the name of our hotel in Russian, and verbal instructions to direct us back to it via the Metro. They then departed and we were free to do as we pleased. The subways in Russia are just about as they have been described, with long, deep, acutely inclined, fast moving escalators with the track and car doors opening simultaneously.

There were very few private automobiles. but even so, more than I had anticipated and all were of Russian make. To emphasize the scarcity of automobiles, I believe I am correct in stating that there are only nine or ten filling stations in the city of Moscow. Because of the limited number of private cars, the sidewalks, buses and the Metro were very crowded. Most of the people we encountered appeared adequately clothed, and seemed to be well nourished. The cathedrals were closed and were being used for state purposes. We were told that there were 20 open churches in Leningrad but we did not see one.

Luncheon in Leningrad on Sunday, September 11, 1966, consisted of smoked eel, chicken consomme, veal, a vegetable, rolls with meat centers, black and light bread and butter and ice cream for dessert. When lunch was over we were loaded on buses and taken several miles into the country for a view of rural living. People were harvesting their own private little potato crops. We passed the marker which commemorated the point at which the Germans were stopped and prevented from entering the city during World War II.

We continued to the Bay of Finland to see Petrodvorets, the former home of Peter I. The palace and beautiful fountains have all been restored. The return trip to Leningrad was most interesting as it was made on one of the publicized hydrofoil boats. Each boat accommodated about 100 people and traveled at accelerated speeds.

That evening we attended the ballet and opera at the Emarald Theatre. Both were given in one evening, one after the other. The ballet was much better than the opera. After the theatre we had dinner at our hotel. An orchestra in the dining room played popular music throughout the meal.

The Orthopaedic Institute

On September 12, 1966 we went to the Orthopaedic Institute where a prepared program was given. A short demonstration consisting of slides showed the treatment of congenital dislocation of the hip, scoliosis and leg lengthenings. This was an old hospital and the personnel were most apologetic for its condition and em-

phasized that a new hospital was being constructed. There was nothing unusual to relate in their treatment of congenital dislocated hip cases except they were performing the "Yugoslavic application" for older cases; namely, the Colonna type reconstruction with osteotomy and shortening of the upper femur with fixation by an intramedullary rod.

In the treatment of scoliosis, the procedure consisted of resecting the ribs at the deforming area and placing them under the skin for two months, then proceeding through the posterior chest, moving the pulmonary structures forward, where the graft was placed on the concave side of the curve, and then in another case on the convex side. A Risser type jacket was used for correction, but we could not see roentgenologic evidence of correction.

One received the impression from one case that an attempt was being made to fuse the epiphysis of a few vertebrae involving the curve. Two hundred cases of leg lengthenings were reported to us. They use their own apparatus for controlling length and rotation. Four infections were reported, but they did not report either serious nerve involvement or amputations. Seven to eight cm of lengthening was recorded, and non-unions complicating such procedures were treated by homogenous grafts and compression.

Luncheon at the Moscow Restaurant in the center of the city consisted of caviar, veal, potatoes, jello dessert, lemon flavored water, coffee or tea.

While in Leningrad, we were taken through the Hermitage Art Museum which was housed in the old winter palace of the czars. The Hermitage ranks among the world's outstanding art museums. There are over 300 rooms in the building with approximately 2,500,000 catalogued items.

Farther into Russia

On the 13th of September we flew in a 4-motor turbo-prop plane from Leningrad to Dushambeh, Russia, which is in central Asia. It was a five hour flight from Moscow and we set our watches back three hours. Dushambeh is the capital of the Tadjik Republic.

The next day we traveled by bus to the mountains at the base of the Pamir range. The road was under construction and was very hazardous at times, but this did not slow the speed of our driver. About half the way to our destination, the waiters and cooks from the hotel got off the bus to prepare lunch which was to be ready upon our return. Farther toward the summit we saw small farming communities where women were cutting wheat with hand sickles. A shepherd with a flowing beard, in native costume and carrying a long hook, was coming down the mountain road with a herd of sheep and goats. It was quite a picturesque sight and made perfect photographic material.

Snow could be seen on the summits in this area and glaciers were numerous. We then returned to the luncheon site, located beside a cold, murky mountain stream. The table was set on the ground and our food was placed on a Persian rug covered with a tablecloth. Shishkebabs of lamb or goat meat were served and our salad was a fresh ripe tomato with sliced onions. Persian melon and watermelon were served later, along with bottled fruit-flavored water. Pear water was served at almost every meal and now it is very difficult for me to even look at a pear.

After breakfast on September 15, 1966, we visited a 1,500-bed general hospital which had a staff of 300 doctors. This large hospital was made up of multiple units, orthopaedic, general surgery, medicine, pediatrics, etc., located in separate buildings. Most units had their own separate surgeries, but each building was connected with sidewalks and an underground tunnel. We were permitted to walk into the surgeries, but never witnessed an operation. We were always too early, too late or it was time for us to move on. Iodine was in evidence in the operating areas and we were told cyclopropane was used for anesthesia.

One must guard against quoting statistics, but we were told one doctor was available for every 1,200 people, however since each doctor only worked about six hours a day, the figures were confusing. The guides also stated they had one pediatrician for every 500 children. Our guides repeatedly emphasized the progress of education and culture in Russia. Ten years of primary education is compulsory and while the universities are free, admission is by competitive examination. Students are paid a salary if their grades permitted them to continue. In order to become a doctor, four years of preparatory training in an allied medical field is required before they are qualified to start medical school. This training might be nursing or working as a surgical or medical orderly. Six years are needed to complete medical school with two additional years of work in an institute if one is to specialize. The ratio of male to female medical students is about 50%, but the present ratio of women practicing medicine is nearer 60 or 70%.

Orthopaedic Hospital

We then went to an orthopaedic hospital where most fractures were treated by the "Bohler" technic, frames, skeletal traction by means of Kirschner wires and calipers. A posterior fracture dislocation of the hip with large displaced fragments and persistent posterior displacement was treated only by skeletal traction. Compression fractures of the spine were treated with the patient recumbent and with the head of the bed elevated; traction was obtained through the axilla with loops of cloth. They remained immobilized for eight weeks.

A tour through a separate building in which cadaver bone and tissue was stored was interesting. There were three types of cadaver bone (1) a wax-covered bone (2) plasma and bone in a plastic container (3) and that preserved in a resin block. Freeze bone was discarded after six months. They showed us a nylon tube normally used for arterial grafts that was used for cruciate and collateral ligament repair of the knee.

We were taken to a local dress factory where clothes and caps were made, both by hand and machine. Bonuses were given for increased production which seemed to indicate the evidence of some small degree of capitalism. Nothing was for sale. Some articles of clothing were embroidered with silk and gold thread and one dress was valued at one thousand American dollars.

Samarkand

The next day we went by Aeroflot to Samarkand. One was constantly impressed by the red haze over the desert and the mountains because of the dust which extended upward of three thousand meters. In Samarkand the city water supply had broken down and one cannot envision the dietary and sanitary ramifications involved when this happens to a city in our present civilization. However, with pear water, vodka and wine, we made out quite well.

Samarkand was captured by Alexander the Great, destroyed by the Tartans or Mongols but rebuilt by Tamerlane. So there is a new and an old Samarkand. A guided tour of the old town took us to the Tower of Ulug-Beg and to the large open city market. The produce and individual sales area included shops under cover, and some small open stalls with markets on the ground. In the evening we attended the Russian ballet and then had dinner about 10:00 p.m. No water yet to drink except bottled apple, lemon and, my favorite, pear.

On the 17th of September, 1966, we flew to Tashkent ("soft rock"). A bus tour of the city in the afternoon included the ruins of the violent earthquakes that had occurred in the spring and summer of 1966. We were told there had been 360 quakes since the start—16 persons killed, 358 injured —and that 300,000 were homeless. Homes that had been destroyed were being replaced with apartments. The Tashkent Hotel showed only a few cracks. We were taken to a "new town" and this corresponded to our shopping centers combined with apartment areas. We walked about and went through the stores and so obtained an impression of the available consumer goods.



ST. BASIL'S Cathedral in Moscow.

We were informed the last quake or tremor had been the 14th of September, 1966. To make our trip complete we had a tremor at 2:00 and 4:00 a.m. the next morning. We were called at 4:00 a.m. to board a plane to Bukhara. This city, half as old as time, was an oasis for the camel caravans on the ancient silk road from China to Damascus. We were taken through the mosques and shown the minarets. There were many stork nests on top of the mosques and minarets, but no storks were there at that time of year. The temperature was estimated to be about 100° in the daytime, but because of the low humidity, it was not too uncomfortable. It was quite cold at night, but this is typical of weather in the desert.

We returned to Tashkent by plane and were placed in the Intourist waiting room to wait for our plane to Moscow. The plane left at 8:00 p.m. and arrived in Moscow five hours later. After turning the clock back two hours, we arrived at the Warsaw Hotel (in spite of the fact we were scheduled to stay at the Ukraine) at 12:30 a.m.

Tour of Moscow

After a breakfast of soft boiled eggs, rolls, white and black bread and very heavy, strong coffee, we were conducted on a sightseeing trip to the Kremlin which included the State Oruzheinaya Palata Museum. The crown jewels, possessions of the czars, gold decorated coaches, dresses of Catherine the Great and other art objects were displayed here.

At the Institute of Orthopaedics and Traumatology we were shown the freeze lab and its function demonstrated. The bank included bone, nerve tissue and fascia. During ward rounds, a Harrington type rod was demonstrated with the use of a homogenous graft. An x-ray showed the rod to extend from crest of the ilium to the apex of the spinal curve.

On the ward a 15-year-old patient with a complete homogenous replacement of the upper ¼th of the tibia, of nine months duration, was demonstrated. Examination of this patient revealed only 10-15 degrees knee motion but it was fairly stable. The x-ray appearance showed the graft was quite dense and sclerotic. Doctors indicated that the fusion of the knee was contemplated later and then we were told the indication for original

surgery was resection of a Codman's tumor. Their armamentarium of instruments and replacements were inspected. They included Smith-Petersen nails, Jude prosthesis, combined metal acetabular and head prosthesis, wires, etc.

In the evening we were the guests at a reception given by the Russian doctors at the Metropole Hotel located in the center of Moscow. Professor M. V. Valkov and his wife, who was a physician, were our host and hostess. The professor's wife could speak English quite well.

Throughout this trip, the language barrier was a tremendous obstacle and undoubtedly explains many of the differences in our understanding of Russia and the Russian people. A University of Languages composed of separate buildings, each devoted to the study of a modern language—English, French, Spanish—was pointed out to us in Moscow. However, not too many Russians speak English and I am certain fewer visitors to the U. S. S. R. speak or have a reading knowledge of Russian.

During a visit such as I experienced, one must realize much of the information received comes from the Intourist Guide, and of course the interpretation of our questions was influenced by their philosophical teachings and feelings. However, I am certain the longer one would stay in that country, the more knowledge one could obtain without a speaking or reading ability of the language. Our group was very fortunate in that a member, a doctor of Russian descent, could speak Russian, but it was interesting that even though he was of great assistance in interpreting the medical conversation, there were some situations he could not fully comprehend or explain.

The next day we were taken on a brief sightseeing trip through Moscow. We went to the University complex, and to the Beazioka Shop where goods could only be purchased with foreign exchange.

There are 33,000 students at the University of Moscow. The stadium seats 100,000 people. After seeing the



RED SQUARE in Moscow.

ski jump and the large swimming area, we returned to Red Square to visit Lenin's tomb. Being a foreigner in this situation proved to be advantageous as Intourists were allowed, at specific times, to break through the block-long lines of the waiting Russian people to visit the tomb. The body of Lenin was displayed on a bed inside a glass enclosure. The people passed by one side, around the tomb, and left the room after viewing the body from three sides. One could touch the glass walls, but my impression was that Madame Toussaud could have done a similar job.

After leaving the tomb we were led along a walk at the rear of the building and saw Stalin's grave, identified only by a marker. Being in disrepute, he was not allowed a monument or statue. On the return trip to our hotel, we passed a hotel under construction and were told that it was to have a swimming pool on the roof which could be reached by helicopter service. We were also told that helicopters would pick up emergency or critically ill patients from the mountains.

We visited the Central Institute of Prosthesis and Prosthetic Manufacturing with Director Professor Basis Popov. The doctor and his engineer demonstrated the bio-electric arm prosthesis including the earlier and late models and we learned that they had used this type on 1,200 patients. It was also said the prosthesis movements probably could be accomplished by control from the brain. They were developing prosthesis for the upper arm and lower extremity. In "jest" it was felt that these arms could be eventually controlled from stimuli from the heart muscle when making love. It was stated that only a few short lessons would be necessary to enable the amputee to use the artificial arm. After a rather prolonged demonstration we were most anxious to see some of the patients with the prosthesis but the interview was terminated, because as usual, there was lack of time. The Canadians have worked with this prosthesis and made it much lighter and the location of the control system has been somewhat altered.

Later in the afternoon Dr. Stoddard from Toronto and myself, with a map and directions of the Metro in hand, returned to Red Square for more sightseeing and a look through Gums Department Store. The underground in Moscow is noted for fast moving escalators, walls of marble, statues, chandeliers and paintings. Gums, a large department store, was located on one side of Red Square. The entire store resembled an arcade with windowed roofs and is made up of many small shops. Consumer goods were in evidence and some shops had queues. Ice cream cones could be purchased and so we indulged ourselves.

We returned to the hotel via taxi, which was inexpensive, and like all

taxis in Russia, marked with a checkered strip. At 6:30 we were taken to the Bolshoi Theatre to see the opera "Tale of the Invisible City of Ketezh," which lasted over three hours. Two intermissions for food and refreshments were most welcome. The props and costumes were very elaborate. Dinner at the hotel at 11:30 ended a busy day.

At 6:00 a.m. on September 21 we were up for coffee and were taken by bus to the airport where a complete breakfast was served. When we started up the plane ramp as we were leaving Moscow, our last visa was taken from us. After a three and one-half hour plane trip we arrived in Paris.

Needless to say we were all very happy to check in at the new modern hotel at Orly Airport. After a shower and a short rest, the entire group gathered for an evening of pleasure at the Lido. After spending the night in Paris, we met the next morning for the final time. Our destination was New York, a city where the promise and opportunity was shining even brighter after a "glimpse inside Russia."



INTERIOR of Gums Department Store in Moscow.

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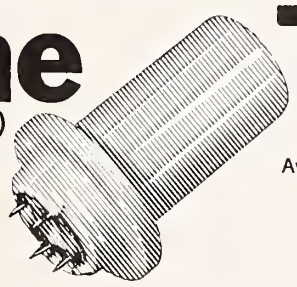
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References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. **2.** Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Practice of Medicine by Medical Corporation Permissible—A suit by a clinic corporation to recover its fee for an operation was not subject to dismissal on the ground that a corporation may not lawfully engage in the practice of medicine, an Ohio trial court ruled.

The Ohio Supreme Court has held that the corporate practice of law is not permitted. The reasoning was that admission to the practice of law is a function of the judicial branch, exercised solely by the State Supreme Court, and that, since the court has seen fit to license only natural persons, corporations may not practice law or be licensed to do so. The legislature's authorization of the corporate practice of law was a usurpation of a judicial power.

The reasoning of those cases was not applicable to the practice of medicine, the court said. Physicians are licensed by the State Medical Board which was established by and exercises powers granted to it by the legislature. The practice of any profession by a corporation or other artificial entity may have been repugnant to the common law. That did not mean that the legislature, which unquestionably has the authority to control by general law the entire field of medical practice, could not authorize one or more licensed physicians to organize a corporation to engage in corporate form in the group practice of medicine, the court said.

Cleveland Clinic v. Sombrio, 215 N.E.2d 740 (Ohio, Jan. 24, 1966).

Denial of Motion to Require Submission to Physical Examination Upheld—A trial court's denial of the motion of an employer to suspend the payment, under the Workmen's Compensation Act, of disability benefits to an employee, because of his refusal to submit to a physical examination by the employer's designated physician, was not an abuse of discretion, the Tennessee Supreme Court ruled. The Act requires an employee to comply with any reasonable request by his employer to submit to a physical examination. The reasonableness of the request is a matter within the trial court's discretion. Since the employee had been examined a short time before by a neutral physician, and there was no allegation that he was other than well qualified to make the examination, the trial court's denial of the employer's request could not be said to be an abuse of discretion.

Tibbals Flooring Company v. Marcum, 404 S.W.2d 498 (Tenn., June 3, 1966).

Physician-Patient Privilege Waived in Workmen's Compensation Death Benefits Case—Benefits were not recoverable, under the Workmen's Compensation Act, for the death of a workman as the result of a fall from a twelfth story window. The evidence, including that showing that he had earlier attempted to commit suicide, sustained the finding that the presumption against suicide had been overcome and that the fall was not accidental, a New York intermediate appellate court ruled.

When proof of the cause of death or disability is presented in support of a compensation claim, the physician-patient privilege is waived, because the claimant's proof has opened the door. It was contended that that rule was inapplicable here, because the claimant had to prove only that death occurred in the course of employment and then rely on the presumption against suicide, without medical proof of causation. The mere assertion of the fact of death, which is itself a medical fact, waived the privilege and permitted the examination of all relevant medical proof.

Its decision could be based on a narrower ground, the court said. Both the death certificate which was in evidence and the claim for compensation stated that the cause of death was "multiple fractures and internal injuries, fall from height." Those statements entitled the employer to prove any underlying medical cause for the fall that could be found in the deceased workman's medical history or his physicians' past diagnoses. The testimony of the deceased workman's psychiatrist as to his suicide attempt was relevant to the question of the underlying cause of the fall.

Beeler v. Hildan Crown Container Corporation, 271 N.Y.S.2d 373 (N.Y., July 1, 1966).

Bullet Removed From Accused's Body in Officers' Presence Admissible in Evidence—In a prosecution against

an accused for assault with intent to murder, a bullet which had been removed from his head and turned over by a hospital physician to police officers who had been called to the hospital to investigate his wound was properly admitted in evidence, the Arizona Supreme Court ruled.

The morning after a caretaker reported that he had returned the gunfire of an unseen prowler and that he thought he had hit the prowler, the accused came to the hospital for treatment of a bullet wound in his head. Hospital personnel, acting pursuant to the statute requiring the reporting of all wounds that may have arisen from an altercation or other unlawful activity, summoned police officers. After removing the bullet in the officers' presence, the physician turned and gave the bullet to them. Ballistics tests established that the bullet had been fired from the caretaker's gun.

The admission of the bullet in evidence did not violate the accused's constitutional right to be free from unreasonable search and seizure. The officers had a right to be present at the removal of the bullet, because they were investigating the wound reported to them by the hospital. The bullet was in plain view when the physician handed it to the officers, and it could not be said that there was any search of the accused. Since the bullet was not the product of a search, there was no violation of the accused's constitutional right.

State of Arizona v. Turner, 416 P.2d 409 (Ariz., July 7, 1966).

Physician Not Liable for Failure to Diagnose Disease of Child Under Consideration for Adoption—In a suit for damages by a married couple against a physician for professional negligence and breach of contract, a trial court did not err in directing a verdict for the physician on the count alleging that he was negligent in having failed to recognize the symptoms of a congenital disease in a child that the couple was considering for adoption, a Florida appellate court ruled. The negligence count was, in effect, one for malpractice, but there was no evidence of any negligence on the physician's part which caused an injury to the patient. There was no physician-patient relationship between the physician and the couple. The relationship between them was exclusively contractual. Therefore, the only possible basis for a recovery by the couple from the physician would be for breach of contract. The jury returned a verdict in favor of the physician on the breach of contract count.

Greenwald v. Grayson, 189 So.2d 204 (Fla., July 26, 1966).

Patient Waives Physician-Patient Privilege by Calling Physician as Witness—In a suit to recover damages for injuries sustained in an automobile accident, a trial court erred in limiting, on the ground of the physician-patient privilege, the cross-examination of the injured person's physician, the Nebraska Supreme Court ruled.

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the injured person, testified as to the extent and permanence of the injuries he sustained in the accident. On cross-examination, the physician was asked about an injury for which he had treated the injured person before the accident. Objections to the questions, on the ground of the physician-patient privilege, were sustained.

By calling the physician to testify as to the extent and permanence of his injuries, the injured person waived any privilege as to him, and the physician could be cross-examined on any point that could have any bearing on the injured person's disability and the cause thereof. Further, it is specifically provided by statute that any person who brings a suit for damages for personal injuries is deemed to have waived the privilege as to any physician who is then attending or who has attended him for the injuries involved in the suit.

Scofield v. Haskell, 142 N.W.2d 597 (Neb., May 20, 1966).

Surgeon and Hospital Liable for Patient's Death Following "Unorthodox" Surgery—Damages could be recovered in a suit against a surgeon and a hospital for the death of a patient because of an exsanguinating hemorrhage suffered as the result of an operation to correct the patient's scoliotic condition, where the surgeon failed to inform the patient's parents of the novel and unorthodox nature of the procedure and the risks incident thereto, a New York intermediate appellate court ruled.

The procedure used was not generally accepted in the community as the proper treatment for scoliosis. It was used in this country only by the surgeon who had developed it five years before. During the five years, there had been untoward and unexpected results in at least five of the thirty-five cases in which he had used the procedure. A year before the operation involved here was performed, one hospital withdrew permission for the surgeon's use of its facilities to perform the procedure because a patient suffered immediate paralysis at the completion of one stage of the procedure.

In view of the facts and circumstances shown by the record, including the fact that there was no immediate emergency, the surgeon had the obligation of disclosing to the patient's parents that the procedure he proposed was novel and unorthodox and that there were possible risks incident to its use, the court said. Further, since the hospital knew the nature of the proposed procedure, the history of the surgeon's use of it, and that the procedure was not recognized as the accepted method for correcting scoliosis by the medical profession in the community or in the country, it had the obligation to determine whether the surgeon had made such disclosure before permitting him to perform the procedure.

One judge dissented from the decision with respect to the liability of the hospital. He pointed out that there was no claim of any negligence on the part of the hospital or its employees, but that its liability was based solely on the claim of lack of an informed consent. Requiring the hospital to determine independently that the consent given was an informed one made it the guarantor of the conduct of all physicians who used its facilities. Further, an inquiry by the hospital into the matter of consent might have constituted a violation of the confidential physician-patient relationship.

Fiorentino v. Wenger, 272 N.Y.S.2d 557 (N.Y., July 12, 1966).

Private Duty Nurse Granted New Trial in Suit Against Patient For Assault and Battery—In a suit for damages by a private duty nurse for injuries sustained when her patient, an alcoholic suffering from delirium tremens, allegedly struck her with a lamp, the instruction to the jury on assumption of risk was, when considered together with the instruction given on contributory negligence, prejudical to the nurse, the Supreme Court of Hawaii ruled. The judgment entered on the jury's verdict in favor of the patient was reversed, and the case remanded for a new trial.

The nurse left the patient alone in her room in bed. Before leaving the room, the nurse applied a posey belt to keep the patient in bed and made sure that the side rails were up. When she heard a noise a few minutes later, the nurse investigated and found the patient out of bed. A struggle between the nurse and the patient ensued, in the course of which the patient allegedly clubbed the nurse on the head with a lamp and caused the injuries complained of. The nurse testified that she knew the patient was in the midst of delirium tremens and that patients in that condition could become violent and dangerous.

The patient denied that the assault and battery occurred, but admitted, on cross-examination, that it could have occurred and that she had forgotten it. The patient contended that, if the assault and battery did occur, she could not be held liable because the nurse had assumed the risk of such an occurrence.

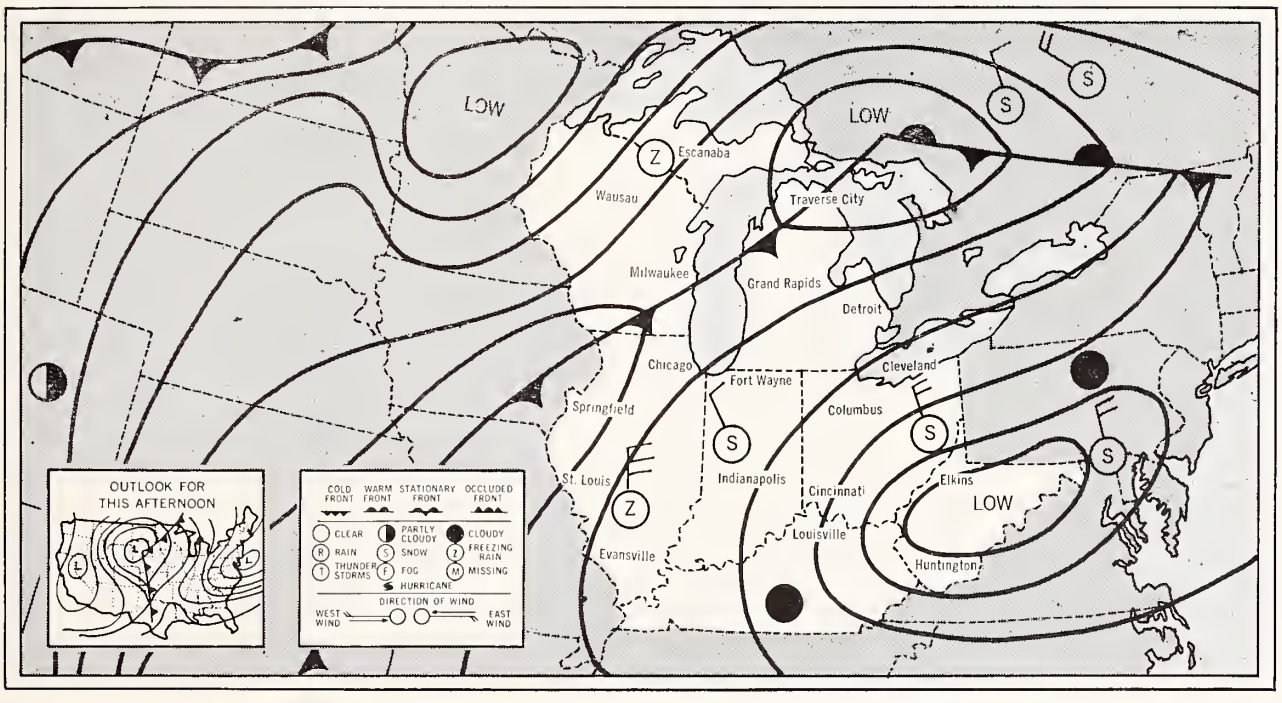
The defense of assumption of risk is an offshoot of the common law rule that—to one who consents no wrong is done. The nurse was an independent contractor because she was a private duty nurse. By her contract, the nurse undertook to use the degree of skill and care that would be used by the members of her profession under the circumstances of the case. The taking of proper precautions was included within the duty of due care imposed on the nurse by the contract. However, the nurse did not, by her contract, guarantee the results of the treatment given or become the insurer of her own safety. The nurse's contract was one of limited assumption of risk.

The jury was instructed that, if the nurse was fully aware of the risk of injury to which she was exposing herself at the time she claims to have been injured, and voluntarily assumed that risk, then the patient was not liable for any injuries that the nurse may have sustained. The instruction, when considered by itself, was correct. However, the jury was also instructed that, if the

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nurse failed to do what a reasonably prudent person would ordinarily have done under the circumstances, she was negligent, and that, if such negligence proximately contributed to her injury, she was not entitled to recover from the patient. When this instruction on contributory negligence is considered together with the instruction as to assumption of risk, the result is an instruction that the nurse had no recourse for any risk that she knowingly undertook. This was not consistent with the fact that the nurse's contract was one of limited assumption of risk.

Burrows v. Hawaiian Trust Company, Ltd., 417 P.2d 816 (Hawaii. Aug. 31, 1966).

Physician's Hospital Staff Privileges Improperly Reduced—The reduction by the executive committee of a public hospital of a physician's staff privileges was invalid, where the bylaw under which the committee acted did not contain a legally effective standard for taking such restrictive action, a Michigan intermediate appellate court ruled.

On the basis of its conclusion that the physician's handling of a particular case constituted inadequate, inappropriate, and improper medical care, the committee prohibited him from using narcotic drugs beyond 48 hours without the written approval of the department chief. The bylaw under which the committee acted provided that the committee could reduce a physician's staff privileges if, in its opinion, the reduction "would be to the best interest of the hospital and its patients."

The hospital is authorized by statute to adopt rules, regulations, and policies to govern its professional work and the qualifications and eligibility of its medical staff. In the absence of any evidence to the contrary, it would assume that the bylaw was adopted pursuant to the proper statutory procedures, the court said. The policy stated in the bylaw under which the committee acted—that physician's privileges could be reduced if, in the committee's opinion, this would be to the best interest of the hospital and its patients—was capable of absolutely no objective application. In contrast, another bylaw provides that a physician's privileges may be revoked for malpractice, unprofessional conduct, unethical practice, or violation of the bylaws. The complete absence of any standard from the bylaw under which the committee acted was indicative of an attempt to confer arbitrary power. The physician has, by virtue of his license to practice, the right to practice in a public hospital, and his exercise of that right may not be restricted by arbitrary means.

Milford v. People's Community Hospital Authority, 144 N.W.2d 687 (Mich., Sept. 13, 1966). ◄

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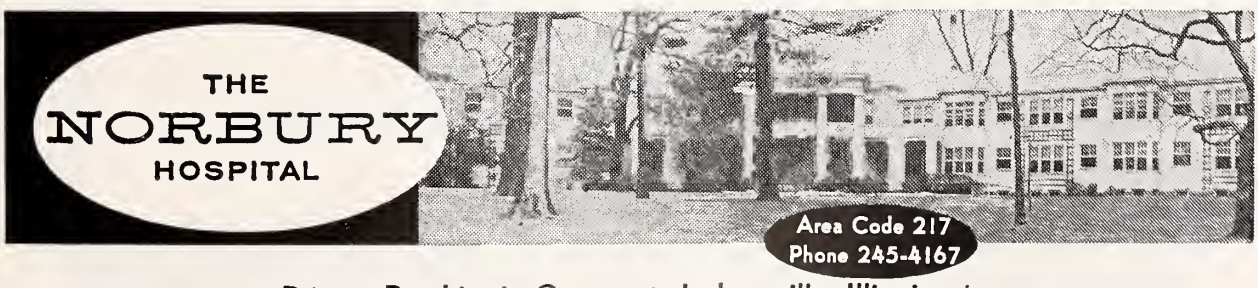
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Montgomery County—CRAWFORDSVILLE—13,000. 83-bed hospital. Home of Wabash College. Need for general practitioners. Medical Priorities Committee has been established. Contact Victor M. Powell, Chairman, Medical Priorities Committee, Wabash College, Crawfordsville.

Vermillion County—Openings for general practitioners in CAYUGA and CLINTON. Population of Cayuga is 1,100 and Clinton is 6,500. County hospital located in Clinton. For further information contact W. D. Britton, M.D., Montezuma, Indiana, secretary of the Parke-Vermillion County Medical Society.

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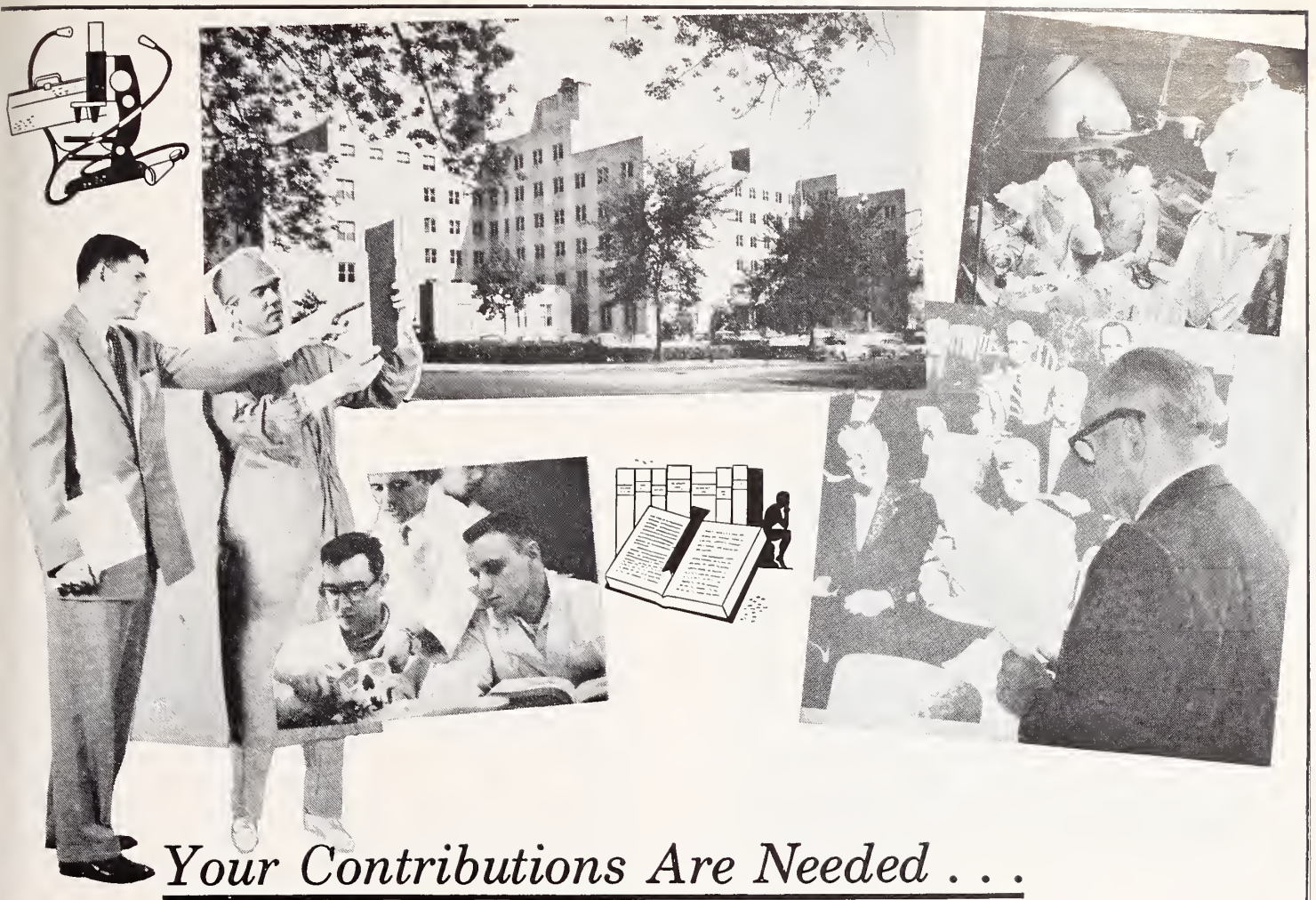
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MONTHLY REPORT—November, 1966

Disease	Nov. 1966	Oct. 1966	Sept. 1966	Nov. 1965	Nov. 1964
Animal Bites	599	753	931	509	603
Chickenpox	224	92	45	296	404
Conjunctivitis	36	65	62	95	77
Diphtheria	0	0	0	0	0
Dysentery, Unspecified	43	62	54	67	28
Gonorrhea	322	421	501	304	299
Impetigo	118	188	214	157	95
Infectious Hepatitis	46	35	41	44	28
Infectious Mononucleosis	49	72	46	89	52
Influenza	514	509	280	1088	665
Measles (Rubeola-Rubella)	94	71	74	236	130
Meningitis, Meningococcal	3	3	5	1	5
Meningitis, Other	3	3	9	3	9
Mumps	359	109	53	108	287
Pertussis (whooping cough)	13	6	17	9	22
Pneumonia	184	146	86	482	238
Poliomyelitis	0	0	0	0	1
Streptococcal Infection	390	348	312	495	426
Syphilis					
Primary & Secondary	6	6	7	2	9
All Other Syphilis	66	52	101	69	101
Tinea Capitis	18	13	3	12	11
Tuberculosis (Active)	82	98	88	90	87





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ABSTRACTS

BOOK REVIEWS

TAKING DOCTORS TO TASK

William K. Keller, M.D.* The Doctors: Martin L. Gross, 605 pp. Random House, $6.95.

Once upon a time there was a country in which certain citizens wore blue suits. Some of those who wore blue suits were short, others were fat, some had business sense, some were not very sensitive to the feelings of others, a few felt they had every right to regulate their work schedule, and some felt they were superior to all non-blue-suit regulations. In short, those people who wore blue suits were people, and therefore possessed all the sins and virtues, and combinations thereof, which are usually found in people. It is obvious that some of those people did not wear their blue suits as well as others, and it is quite true that some of them should not have been allowed to purchase a blue suit in the first place. However, it was only fair to recognize that there were many good men wearing blue suits and trying hard, within the framework of being "people," to keep their suits cleaned, pressed and serviceable. End of fable.

The author of this bound-to-be-controversial book has used a technique which unhappily, has been proved very effective in other times and places. To leave it to the arts, one recalls Mark Antony's speech, which began, "Friends, Romans, countrymen . . . I come to bury Caesar, not to praise him," continues to insist that Brutus is an "honorable man," pauses to weep over Caesar (and to let the plebeians see how fat-headed they were to have been taken in by that "honorable man"), shows Caesar's mortal wounds, and implores, "Good friends, sweet friends, let me not stir you up to such a sudden flood of mutiny. They that have done this deed are honorable." Again the poor, benighted plebs ("best described as innocents") are suckered into clamoring for indiscriminate blood and as they charge off to burn and pillage, the noble Mark Antony says, "Now let it work: Mischief thou art afoot, Take thou what course thou wilt." This is an effective method of taking fact, and after distorting and reemphasizing parts, coming out with a pretty sensational end result.

When I first began to read this book, I thought that here was an ally who might be used to help with the ever-present need for the medical profession to improve itself in all ways. This impression hardly lasted the page. The rest of the book is documented (I did not look up every reference, but he speaks out so much in favor of malpractice suits that he surely has protected himself against libel) and shows that, in general, there are some good, competent, scientifically well-trained, board-certified and humane physicians who are on call 24 hours a day, 365 days a year, who drive old cheap cars, do not play golf (golf seems to bug him), and who live in modest homes. He says, "It should be made abundantly clear that it is *not* (the italics are his) the purpose of this book to deny or downgrade the achievements of modern medicine collectively, or those of the physician individually, but rather to use them as an effective and constructive yardstick for the profession as a whole . . . ." He then proceeds to lay on like Punch and Judy. In his quotes, he is a great taker-out-of-context, *but* (the italics are mine) he apparently has learned a great deal about medicine and the activities of the American physician in the "over three years of extensive research."

Many of the charges he makes do indeed need continued looking into by everyone concerned for, after all, even *he* admitted that the doctor was human. His charges of iatrogenic (doctor-caused) illness, incompetence, carelessness, lack of humanity, unscientific method, malpractice, "trade school" medical schools, lack of interns and residents, would all do credit to Mr. Shakespeare, only they would have been well said. As stated above, physicians are people and therefore need to improve themselves in every possible way.

As to the book itself, it will sell simply because iconoclasm is always interesting. It is to be hoped that *only* good will come of it to the ultimate benefit of all concerned.

In the meantime, it is possible that the author might want to take up residence in our town. He would be comforted by our lack of Town versus Gown, the close cooperation of the entire medical profession, the Medical School — yes — even our hospitals. Dr. Robert H. Kennedy, the American College of Surgeons' chairman of the Committee on Trauma, is quoted in this book, "There is little doubt in my mind that the weakest link in the chain of hospital care in most hospitals in this country is the attention given to and in the emergency department." Addressing the American Association for Automotive Medicine, Dr. Kennedy also said (and this is not quoted in the book), "If you are going to have an automobile accident probably about the best place in this country for first aid and emergency hospital care is Louisville, Kentucky." Abraham Flexner who wrote the world-shaking Flexner Report and of whom the author apparently approves, was born and raised in Louisville and has relatives still living here. Yes, maybe the author should come down with us; for if he ever gets sick, the prospect of having to be treated by all those poorly trained, unscientific, non-certified, inhumane, artless, rich, selfish, careless and malpracticing doctors he knows might well bring on an immediate iatrogenic death.

We all need some pressing, but our blue suits are not that mussed.

—Reprinted with permission from *The Louisville Courier-Journal* Oct. 2, 1966.

* Dr. Keller is professor and chairman of the department of psychiatry, University of Louisville Medical School.

SPONTANEOUS REGRESSION OF CANCER

Tilden C. Everson and Warren H. Cole, W. B. Saunders & Co. Philadelphia 1966; 560 pages; profusely illustrated; $20.00.

The authors of this painstaking compilation have searched the world's literature; they have a formidable index of personal communications; they have assembled within the covers of a single volume all available cases of proven, spontaneous regression of demonstrated malignant disease. The entire medical profession is deeply in their debt.

At the very start of my professional career, I had occasion to encounter a case of this type (The Case of the Old Man Who Died Young, *JISMA*, Sept., 1961). I have never encountered a case since. The authors have collected 176 cases that meet the standards they have set. The total is pitifully small but it does raise the ever pertinent query: WHY? ?

On p. 518, the succinct summary says, "It is conceivable that an adequate explanation of many cases of spontaneous regression of cancer may await the discovery of hormones at present unknown or the isolation and identification of specific antibodies to cancer or even the discovery of a new group of substances which are unrelated to either hormones or antibodies."

And until that day dawns, this book is recommended reading for every doctor from the neophyte up to the chairman of the department! I know that I shall come back to it many, many times!

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

ENCYCLOPEDIA FOR MEDICAL ASSISTANTS

Louis Brachman, M.D., Cathedral Square Publishing Company, Milwaukee; 448 pages; illustrated.

This reference book ranks somewhere between an encyclopedia and

handbook. There is presently a need for such a reference since edical assistants are called upon to do more and more procedures, eviously done by physicians, and the clinical work in a physician's fice has increased tremendously.

The book is divided into seven chapters dealing with: records; ırsing procedures; first aid; public relations; laboratory technic; lling and collections; insurance and medical ethics. There are many ustrations of emergency procedures, instruments, laboratory tech- cs, x-rays and microscopy of blood and urine findings. These ustrations are photographic reproductions and pen sketches and e all well done.

The final chapter pictures the career of a medical assistant and ints out the outstanding qualities required of one aspiring to this ofession. There is a table of weights and measures which is useful r quick reference; a short dictionary of medical terms is addended. The printing is clearly readable and the paper is of good quality. his book is worth having in every office. The writing is clear and ncise and makes easy reading even for a nonprofessional reader. or the novice it is a solid framework on which to build an edu- tion for a medical assistant.

DAVID A. BICKEL, M.D.
South Bend

URRENT DIAGNOSIS

Edited by Conn, Clohecy and Conn, W. B. Saunders & Co., Phil- elphia, 1966; 843 pages; illustrated; $19.00.

This is the obvious companion volume to *Current Therapy, Current ediatric Therapy* and similar short cuts(?) to giving information ost compactly and with the minimum of effort. I rather imagine at, when computers furnish appropriate answers, they print out one two page "bits" of knowledge in just this manner.

Now, cirrhosis of the liver—as just one example—can be sum- arized in the page and a half as this volume does on 370-71. How- er, I, for one, prefer the fuller discussion as furnished by any andard text; I'm looking at my copies of Cecil-Loeb, Price, Har- son, etc. However, I must acknowledge that a *speedy* reply may desired by the student cramming for exams, the extremely busy actitioner and others such. It must acquire a niche in many oraries as demonstrated by the immense success of the companion xts. In this limited context, it is superb: a magnificent effort at ndensation as rendered by some of the best brains in the medical ofession.

As usual for Saunders & Co., the printing is excellent, the binding st class and the price quite competitive.

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

Abstracts From Various Literature, Prepared by AMA

TTEMPTED ADOPTIVE IMMUNOTHERAPY OF CUTE LEUKEMIA BY LEUKOCYTE TRANSFUSIONS

L. Schwarzenberg et al. (Institute de Cancerologie et d'Immuno- netique, 94 Villejuif, Paris)

Lancet 2:365-368, (Aug. 13), 1966.

Twenty-one patients with acute leukemia were given transfusions leukocytes from donors with chronic myeloid leukemia. All but e of these patients were resistant to all available forms of chemo- erapy or unable to be treated by drugs (mainly due to a significant utropenia). There were nine remissions; six were complete (normal ood and bone marrow) and three were incomplete. The remissions re of short duration. The mechanism of the antileukemic effect these leukocyte transfusions seemed to be dependent on the im-

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munological reactions of the immunologically competent cells in the transfused population.

HIRSCHSPRUNG'S DISEASE AND MONGOLISM

L. Graivier and W. K. Sieber (Locke Medical Bldg., Dallas)
Surgery 60:458-461, (Aug.), 1966.

In the analysis of a series of 84 cases of histologically verified Hirschsprung's disease, mongolism was a coincidental occurrence in three cases. A review of the literature revealed that 16 cases of Hirschsprung's disease associated with mongolism have been reported. On the basis of data obtained from family studies, a ganglionic megacolon is genetically determined. So high a ratio of coincidental occurrence of mongolism, with its genetic etiology, and Hirschsprung's disease leads to the speculation that the genetic factors for Hirschsprung's disease are carried by chromosome No. 21 as is mongolism.

MODIFIED MASTER'S TEST: EFFORT ECG COMBINED WITH ALIMENTARY LIPID LOADING

G. Finardi et al. (Department of Medical Semeiotics, Pavia University, Pavia, Italy)
Minerva Cardioangiol. 14:394-398, (July 7), 1966.

Eighteen patients with clinically suspected but electrocardiographically not proved coronary insufficiency were retested by a new method: the patients were fed a high-lipid meal and then Master's test was performed. After this double provocation, lipid loading combined with an increased physical effort, 11 of the 18 patients manifested clear-cut ECG changes typical of a coronary insufficiency. The same test performed on 13 healthy controls did not produce any electrocardiographic abnormalities.

PRIMARY CARCINOMA OF THE LIVER

G. H. Lawrence et al. (Virginia Mason Hosp., Seattle)
Amer. J. Surg. 112:200-210, (Aug.), 1966.

Five cases of successful hepatic resection for hepatoma and cholangiocarcinoma are reported. Except in the debilitated patient, a needle biopsy giving positive results should not be considered as an indication of nonresectability, but rather it should be used as a means of alerting the surgeon to prepare his patient and operating team for hepatic resection. The presence of pulmonary metastases is not in itself a criterion of inoperability in selected cases. Total hepatic lobectomy is the procedure of choice in primary hepatic carcinoma. All five patients are living and apparently free of disease.

CARCINOMA METASTATIC FROM THE THYROID TO THE LUNGS

A. R. McGee (Toronto East General Hosp., Toronto)
Radiology 87:516-517, (Sept.), 1966.

A twenty-four-year radiographic record of an extremely widespread metastatic thyroid carcinoma of the lungs has been reported. Also present were secondary nodules in the left kidney. The long survival time in spite of the degree of secondary metastatic change as indicated on the films suggests why the earlier nomenclature identified the disease as "benign metastasizing thyroid."

USE OF SILVER-NITRATE SOLUTIONS IN MAINTENANCE OF AIR HYGIENE IN A BURNS UNIT

W. W. Monafo et al. (Department of Surgery, Washington University School of Medicine, St. Louis)
Lancet 2:303-305, (Aug. 6), 1966.

Eleven patients in a burns unit for varying lengths of time had their dressings kept wet with 0.5% silver-nitrate solution. Normally the air surrounding a burned patient is heavily contaminated with bacteria, especially when dressings are being changed. With the silver nitrate solution this was not the case; bacterial counts of air samples taken from the burns unit were not higher than those in air taken from the surgical ward.

CORDOTOMY FOR INTRACTABLE PAIN OF NONMALIGNANT ORIGIN

J. Joyner, J. Mealey, and L.W. Freeman (1100 W. Michigan St., Indianapolis)
Arch. Surg. 93:480-486, (Sept.), 1966.

Cordotomy was effective and beneficial in the alleviation of intractable pain secondary to benign disease in 17 of 20 patients. The success of cordotomy is contingent on three principles—the proper selection of patients, adequate cordotomy with a sustained high level of analgesia, and an avoidance of complications.

CARCINOMA OF THE CERVIX

J. A. Wall et al. (Baylor University College of Medicine, Houston)
Amer. J. Obstet. Gynec. 96:57-63, (Sept. 1), 1966.

Of 387 patients, 104 were diagnosed as having stage 0 lesions or carcinoma in situ. Additionally, a total of 283 cases of invasive carcinoma afford a reasonable chance for accurate estimation of the efficacy of the therapeutic modalities employed. Vaginal or abdominal hysterectomy was performed, if carcinoma in situ was found, or radiotherapy was given if invasion was demonstrated. In the majority of instances, patients were treated by intracavitary radium application and then by external beam therapy. Administration of carefully calculated amounts of radiation sufficient to destroy radiosensitive disease appears to offer the best hope of improving survival rates. Radiotherapy is considered more advantageous in invasive cancer than operation, even for early lesions.

RELATIONSHIP OF CERVICAL DYSPLASIA TO IN SITU AND INVASIVE CARCINOMA OF THE CERVIX

A. Varga (University of Southern California Medical School, Los Angeles)
Amer. J. Obstet. Gynec. 95:759-762, (July 15), 1966.

After a prospective study of 78 patients in whom an initial cervical punch biopsy revealed dysplasia, a subsequent diagnosis of in situ carcinoma was made in 39 cases and invasive carcinoma in 11 cases. The association of severe dysplasia and malignant disease was 64%. If childbearing is no longer desirable, and the cervical cone biopsy contains severe dysplasia, particularly if the lesions approximate the edge of the cone, removal of the uterus is recommended.

EFFECTS OF EXERCISE AND CHOLESTEROL-FREE DIET ON HUMAN SERUM LIPIDS

R. C. Goode, J. B. Firstbrook, and R. J. Shephard (University of Toronto, School of Hygiene, Toronto)
Canad. J. Physiol. Pharm. 44:575-580, (July), 1966.

Six male subjects were maintained on a diet free of all animal fats for 54 days; carbohydrate intake was increased to maintain an approximate caloric balance. Serum cholesterol decreased progressively to a low plateau over the first three weeks, and thereafter showed a small rise, suggesting increased synthesis. Treadmill exercise sufficient to increase daily energy expenditure by a sixth was carried out for 14 days during the phase of increased synthesis. Serum cholesterol levels did not differ significantly between exercised and control subjects, but serum triglycerides decreased significantly ($P < 0.05$) over the exercise period.

SOLITARY PYOGENIC LIVER ABSCESS IN PATIENTS WITH DIABETES MELLITUS

J. M. Holt and C. J. F. Spry (Radcliffe Infirmary, Oxford, England)
Lancet 2:198-200, (July 23), 1966.

Five of 14 patients with solitary pyogenic liver abscess were diabetic whereas none of the 21 patients with multiple liver abscess had diabetes mellitus. An association between solitary pyogenic liver abscess and diabetes mellitus is suggested. Gas-producing organisms within the abscess cavity may lead to early diagnosis by x-ray.

INTERNAL CAROTID ARTERY LIGATION: A FOLLOW-UP STUDY

J. B. Oldershaw and H. C. Voris (30 N. Michigan Ave., Chicago)
Neurology 16:937-938, (Sept.), 1966.

Internal carotid artery ligation produces a potential cerebrovascular insufficiency on the ligated side. Early postoperative neurological complications may be avoided by gradual occlusion with a mechanical clamp; however, the risks of late thrombosis on the ligated side should be considered. Of 21 patients who had internal carotid artery ligation, two developed subsequent hemiplegia after one year and 13 years, respectively, which suggests an incidence of stroke nearly 25 times that encountered at large.

RAYNAUD'S SYMPTOMS AND CARPAL CANAL SYNDROME

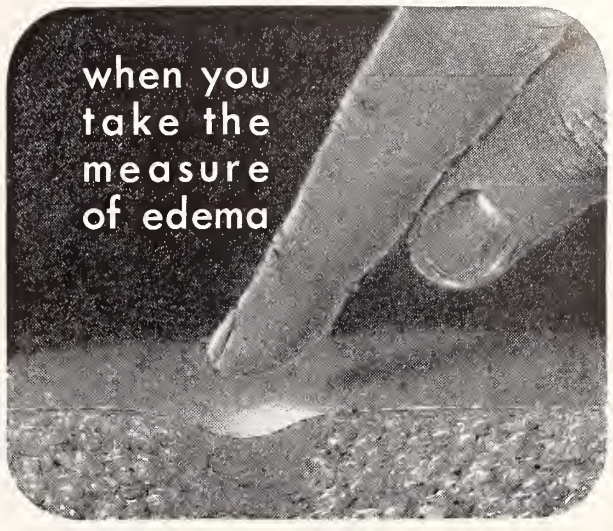
H. Kulbertus, V. Baudinet, and P. Colignon (Universite de Liege, Institut de Medecine, Liege, Belgium)
Rev. Med. Liege 21:319-321, (July), 1966.

Five women and two men with Raynaud's symptoms were studied. Four patients described evident manifestations of a carpal canal syndrome, together with acrosyncope. Vasomotor disorders occurred in two instances before, once after, and once concomitantly with acroparesthesia. The remaining three patients complained only of Raynaud's symptoms but presented the symptomatology of a carpal canal syndrome, as well. All seven cases constitute a clinical concurrence of digital acrosyncope occurring concurrently with a carpal canal syndrome.

RADIATION THERAPY IN THE CONTROL OF PERSISTENT THYROID CANCER

G. E. Sheline, M. Galante, and S. Lindsay (University of California School of Medicine, San Francisco)
Amer. J. Roentgen. 97:923-930, (Aug.), 1966.

The study is concerned with cases of 58 patients who received external radiation therapy for control of thyroid cancer which was not resectable because of type of extension and invasion. Five of nine patients given radiation therapy for papillary carcinoma have survived from five to 25 years without recurrence and 12 with probable microscopic persistent papillary cancer have had no recurrence over periods of six to ten years. Of eight patients with follicular carcinoma treated five years ago, there has been no local recurrence in six. Three of seven patients observed ten years or more are without recurrence after 10, 16, and 18 years. One of seven patients with anaplastic carcinoma was without local recurrence for six years; another has been free of disease for two years and a third had recurrence after three years. Five patients with giant cell carcinoma died within two months. Three of six patients with lymphosarcoma limited to the thyroid were without evidence of lymphoma for periods of 5, 17, and 20 years. ◄



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DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur. Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

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Mr. Crownhart Honored

Mr. Charles H. Crownhart, secretary and general manager of the State Medical Society of Wisconsin, recently celebrated his 25th anniversary in the job. He was honored by a 500-guest reception and was presented with his portrait, the work of the famed artist Aaron Bohrod.

AMA Publishes New Guide for Medical Society Blood Committees

The American Medical Association has published a new "Guide for Medical Society Committees on Blood" as a part of a continuing program to encourage and enhance medical leadership and direction in blood banking and blood uses.

The guide is being sent to all state and county medical societies. Copies of the pamphlet and additional information on blood banking and blood uses are available from the Department of Environmental Health of the AMA, 535 N. Dearborn St., Chicago 60610.

Medical and Surgical Motion Picture Catalogue Now Available

A new and revised edition of "Medical and Surgical Motion Pictures," the American Medical Association's catalogue of selected medical and health films, is now available.

More than 1,000 new film titles have been added in the new edition of the catalogue, bringing the total film listings to more than 4,000.

The first catalogue produced by machine handling of data was published in 1964. The new edition will not only bring the material up-to-date but also will feature refinement and reorganization of format and a more comprehensive and more generic approach to the teaching and learning needs of its users. All films listed are readily available in the United States, and have been found useful by recognized reviewing groups.

Copies of the catalogue are available without charge from the Medical Motion Picture Section, Department of Postgraduate Programs, American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610.

Life Insurance Medical Research Fund Announces Two Indiana Grants

The Life Insurance Medical Research Fund announces a continuation of its long-term grant to Dr. John B. Hickman for investigation into the retinal circulation in man. The research project has been supported by the fund since 1959, and will benefit this year by $16,500.

The Fund also has announced the selection of Dr. Gerald R. Yarnell of Indiana University School of Medicine as a Medical Scientist Fellow, with a grant for the period from 1965 to 1971 of $24,330. The fund is supported by most of the life insurance companies of the United States and Canada, and is devoted mainly to basic research which may ultimately increase longevity.

The member companies in Indiana are the American United Life Insurance Company, the Indianapolis Life Insurance Company, the Lincoln National Life Insurance Company, the Peoples-Home Life Insurance Company of Indiana and the State Life Insurance Company.

Dr. Walther Elected

Dr. Joseph E. Walther, Indianapolis, was elected vice-president of the American College of Gastroenterology at its recent annual meeting in Philadelphia.

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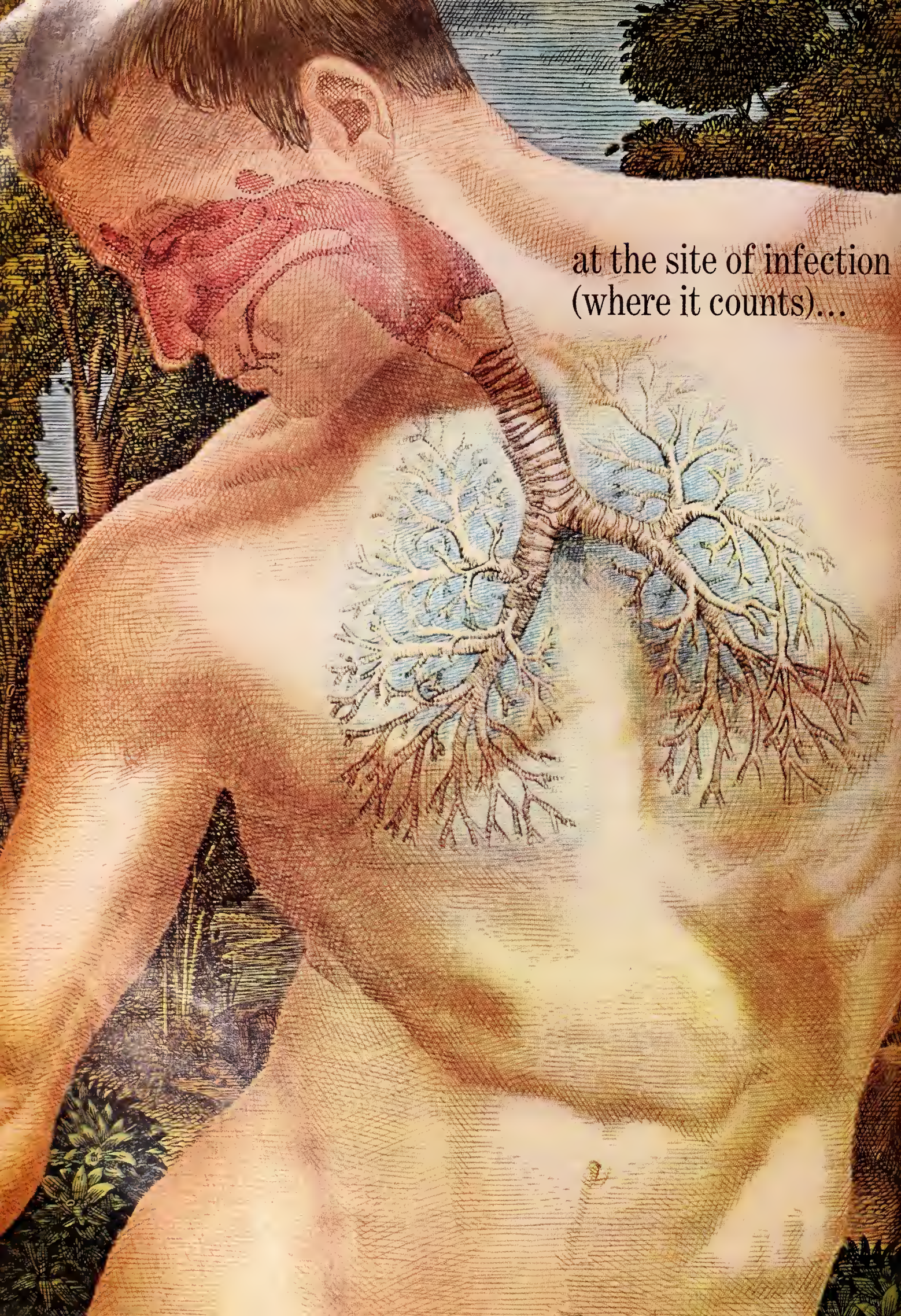
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Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

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Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings wer characterized by increased direct-reacting bilirubin, elevate alkaline phosphatase levels, negative or weakly positive cephali flocculation and thymol turbidity tests, elevated serum glutami oxalacetic transaminase levels, peripheral eosinophilia, and no mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has n been reported in other patients taking prolonged courses of t medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, ar patients with rheumatic fever have taken prophylactic doses 0.5 Gm. daily for two years without difficulty. In one group 144 patients who received the drug daily for two years, no jau dice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episod of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels we determined in a group of fifty-four adults and children who to 250 mg. of Ilosone daily for an average of sixteen months rheumatic fever prophylaxis. The results were compared wi those of a similar group of forty-four patients who received pe icillin. There were no cases of jaundice in either group. Elevati of SGPT and serum alkaline phosphatase levels during the cour of treatment was observed in one patient treated with Iloso and in two patients treated with penicillin. Seven other patie in the group receiving Ilosone and four others in the penicil group showed elevations in one of the tests at some time duri administration of the drugs.

Very satisfactory therapeutic results, without toxicity, we reported in 102 pediatric patients who received short-term (t day) courses of Ilosone in the treatment of streptococcus inf tions. Results of liver function tests in these patients were co parable to those in a similar control group who had receiv penicillin.

Gastro-intestinal disturbances not associated with hepatic fects are observed in a small proportion of individuals as a res of a local stimulating effect of the medication on the aliment tract; however, the normal intestinal gram-negative bacte flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the of erythromycin, there have been occasional reports of urtica skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of b weight, the usual dosage is 5 mg. per pound every six hours; children twenty-five to fifty pounds, 125 mg. every six ho (Tablets Ilosone Chewable should be chewed or crushed swallowed with water.)

For adults and for children over fifty pounds, the usual do of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythrom therapy should be considered.

In the treatment of syphilis, the recommended total dosa 20 to 30 Gm. given in divided doses for a period of ten to fif days. Close follow-up of the patient is necessary since eryt mycin drugs have not had adequate evaluation in all stage syphilis. Examinations of spinal fluid are recommended as of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days recommended. In the treatment of gonorrhea, patients wi suspected lesion of syphilis should have a dark-field examina before receiving antibiotics, and monthly serologic tests sh be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to b in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 1 size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equiv to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size pack

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69,
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398,
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Dates Announced for American Industrial Health Conference

The 1967 American Industrial Health Conference will be held April 10 to 13 at the Americana Hotel in New York City.

The meeting is sponsored jointly by the Industrial Medical Association and the American Association of Industrial Nurses. For further information write the Conference at 55 E. Washington St., Chicago 60602.

Current Concepts in Chest Radiology Symposium Offered May 1-5 in Kentucky

The Department of Radiology of the University of Kentucky Medical Center is presenting a symposium on "Current Concepts in Chest Radiology: Pathophysiological Correlations" from May 1 to May 5, just before the Kentucky Derby. Radiologic findings will be explained in terms of basic underlying pathological mechanisms. A distinguished visiting faculty and staff members of the college of medicine of the University of Kentucky will participate in this symposium. A film seminar will be conducted at the end of each day.

The visiting faculty includes: Dr. William Anderson, University of Louisville School of Medicine; Dr. Mary Ellen Avery, Johns Hopkins Hospital, Baltimore, Maryland; Dr. Corning Benton, Cincinnati Children's Hospital, Cincinnati, Ohio; Dr. Robert G. Fraser, Royal Victoria Hospital, Montreal, Quebec, Canada; Dr. F. H. Kemp, The Radcliffe Infirmary, Oxford, England; Dr. Sidney Nelson, Ohio State University College of Medicine, Columbus, Ohio; Dr. Eugene Robin, University of Pittsburgh School of Medicine, Pittsburgh, Pa.; Dr. S. W. Silverman, Cincinnati Children's Hospital, Cincinnati, Ohio; Dr. A. W. Templeton, University of Missouri Medical Center, Columbus, Missouri; Dr. Jerry F. Wiot, Cincinnati General Hospital, Cincinnati, Ohio.

ISMA Members Invited to Sixth National Heart Symposium

"The Metabolic Basis of Human Atherosclerosis" will be the general subject of the Sixth National Symposium of the Heart Association of Southeastern Pennsylvania, to be held on February 23 and 24, in the Sheraton Hotel in Philadelphia.

Members of ISMA are invited to attend. The meeting is acceptable for 10 hours Category 1 credit with the American Academy of General Practice. For more information write Mr. Lyle L. Perry, 318 S. 19th St., Philadelphia, 19103.

New Orleans Graduate Medical Assembly Will Meet March 6-9

All members of ISMA are invited to attend the New Orleans Graduate Medical Assembly which meets from March 6 to 9 at the Roosevelt Hotel. The visiting faculty has been chosen for experience and aptitude in graduate teaching.

The program is planned to cover subjects of general medical interest. The American Academy of General Practice has accepted the program for 30½ hours of credit. The registration fee is $25.00. Address the Assembly at 1430 Tulane Ave., New Orleans 70112.

11th Annual Postgraduate Course On Fractures and Other Trauma

The Eleventh Annual Postgraduate Course on Fractures and Other Trauma will be conducted by the Chicago Committee on Trauma of the American College of Surgeons in the John B. Murphy Auditorium, 50 E. Erie St., Chicago, on April 19-22.

The tuition of $80.00 includes a reception and a luncheon at the Kungsholm Restaurant on one of the meeting days. For registration in the course write to Dr. James P. Ahstrom, Jr., 55 E. Erie St., Chicago 60611.

Cleveland Clinic Announces Four Postgraduate Courses in February

The Cleveland Clinic Education Foundation will present four postgraduate courses next month in Cleveland. Courses on "General Practice" will be offered on February 1 and 2 and courses on "Perspectives of Electrophoresis and Clinical Chemistry" will be given February 15 and 16.

Further information on the courses may be obtained by writing the Director of Education, Cleveland Clinic Educational Foundation, 2020 E. 93rd St., Cleveland 44106. ◄

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County, District News

Adams

Dr. Norval S. Rich, Decatur, is the new president of the Adams County Medical Society and Dr. Martin J. Graber, Berne, the new secretary-treasurer. The society met Nov. to view a film entitled "Current Concepts Replacement Estrogen Therapy."

Cass

Whitman Reynolds, M.D., assistant medical director of Equitable Life Assurance Co. New York, presented a discussion on the object of "The Medical Information Bureau" at the Nov. 14 meeting of the Cass County Medical Society.

Dearborn-Ohio

Dr. Gary Scudder, presently serving in the U. S. Army, spoke on the "Political and Military Struggle in Vietnam" at the Nov. meeting of the Dearborn-Ohio County Medical Society.

DeKalb

New officers of the DeKalb County Medical Society are: Drs. John Hines, Auburn, president; C. B. Hathaway, Jr., Auburn, vice-president and Ben Graber, Waterloo, secretary-treasurer.

Elkhart

Dr. John Nurnberger, professor of psychiatry at the I.U. Medical Center, spoke on "Suicidal Threats and Attempts" at the Nov. 3 meeting of the Elkhart County Medical Society.

Grant

New officers of the Grant County Medical Society are: Drs. Richard E. Lahr, president; John C. Jarrett, vice-president and Robert G. Young, secretary-treasurer.

Henry

"The Effect of Digitalis in Non-failing Heart and General Therapeutics" was the topic chosen by Dr. Jack Williams, of the VA Hospital Department of Cardiology, when he spoke at the Nov. 17 meeting of the Henry County Medical Society.

Howard

Dr. Donald Fields is the new president of the Howard County Medical Society. Other officers are: Drs. Norman Wilson and Philip Prather, vice-presidents and Jack Higgins, secretary-treasurer. Speaker at the Nov. 1 meeting was Dr. Edward T. Tyler who spoke on "Mechanism of Action of Oral Contraceptives."

Johnson

Newly elected president of the Johnson County Medical Society is Dr. George Brown, Greenwood. Dr. Merrill Wesemann, Franklin, will serve as secretary-treasurer for 1967.

LaPorte

Dr. Peter J. Pilecki is the new president of the LaPorte County Medical Society; Dr. William E. Wolf, vice-president and Dr. Charles K. Liddell, the new secretary-treasurer. Mr. Oliver Fields of the AMA spoke on "Quackery" at the Nov. 15 meeting of the society.

Marshall

New officers of the Marshall County Medical Society are: Drs. Marshall Stine, Bremen, president; Kent Guild, Plymouth, vice-president and Cecil R. Burket, Bremen, secretary-treasurer.

Parke-Vermillion

Dr. John Hetherington, Terre Haute, was the main speaker at the Nov. 16 meeting of the Parke-Vermillion County Medical Society. His topic was "Head Injuries." New officers of the group are: Drs. R. S. Bloomer, Rockville, president and W. D. Britton, Montezuma, secretary-treasurer.

Putnam

The Putnam County Medical Society has elected the following as new officers: Drs. John Ellett, Jr., Coatesville, president; James B. Johnson, Greencastle, vice-president and Anne S. Nichols, Greencastle, re-elected secretary-treasurer.

Shelby

New officers of the Shelby County Medical Society are: Drs. Joseph Moheban, president; William Deupree, vice-president and P. M. Inlow, secretary-treasurer. All of the new officers are from Shelbyville.

Tippecanoe

Dr. J. Stefaniak and Mr. Robert Brunger spoke on "Health, Inc." regarding a professional survey on the area health facilities at the Nov. 7 meeting of the Tippecanoe County Medical Society.

Vanderburgh

The Vanderburgh County Medical Society held its annual joint meeting with the Bar Association Nov. 15. Speaker was Dr. Max Karl Newman of the Wayne University School of Medicine, Detroit. His topic was "Attorney-Physician Relationships in Law and Medicine." ◄

Deaths

Robert M. Hansell, M.D.

Dr. Robert M. Hansell, a physician since 1939, died Nov. 6 at Community Hospital in Indianapolis at the age of 53.

Born at Rising Sun, Dr. Hansell had been an Indianapolis resident 27 years. He was graduated from the I.U. School of Medicine in 1939 and was a staff physician at Methodist, Community and St. Francis Hospitals. He was a member of the Marion County Medical Society.

D. J. Holland, M.D.

Dr. Deward J. Holland, 87, retired physician who had served the Bloomington and Bedford areas for 56 years, died Nov. 24 at his home.

Born at Leesville, Dr. Holland was graduated from the University of Louisville Medical School in 1907. He served as acting assistant surgeon at the Marine Hospital in Louisville until 1908, when he began private practice in Harrodsburg. He moved his practice to Bedford in 1921 and to Bloomington in 1927. He was a Senior Member of ISMA, a member of the 50-Year Club and the Owen-Monroe County Medical Society.

Nicholas A. James, M.D.

Dr. Nicholas A. James, retired general practitioner, died Nov. 12 at Tell City at the age of 84.

Dr. James formerly owned and operated Parkview Hospital in Tell City for nearly 30 years. Graduated from the University of Louisville Medical School in 1904, he and his wife erected the 19-foot Christ of the Ohio statue which overlooks the Ohio River. He practiced in St. Meinrad from 1904 until 1914 and then began his practice in Tell City, where he practiced 56 years. He retired in 1960. He was a Senior Member of ISMA, a member of the 50-Year club and the Perry County Medical Society.

Venice D. Keiser, M.D.

Dr. Venice D. Keiser, retired medical officer for the U.S. Army Finance Center at Fort Benjamin Harrison, died Nov. 26 at the age of 73.

Dr. Keiser, who was born at Terre Haute, had been an Indianapolis resident 58 years. He retired from the Finance Center medical officer position in 1961 after 10 years of service. He was graduated from the I.U. School of Medicine in 1917 and served a a first lieutenant with the 334th Field Ho pital in France during World War I. He wa a Senior Member of ISMA and a membe of the Marion County Medical Society.

John R. Porter, M.D.

Dr. John R. Porter, 73, retired Lebano physician, died Nov. 17 at his home after three-year illness.

A former member and president of th Boone County Medical Society, Dr. Porte was the father of two physicians and wa himself a third generation physician. H received his M.D. degree from the I.U School of Medicine in 1919 and began h practice in Lebanon in 1923. He retire about 10 years ago.

Edward L. Rigley, M.D.

Dr. Edward L. Rigley, South Bend ea nose and throat specialist, died Nov. 26 the age of 64.

Graduated from the University of Mich gan Medical School in 1929, Dr. Rigley pra ticed at Ann Arbor and Omaha, Nebrask before coming to South Bend in 1937. H was a member of the medical staffs of S Joseph's and Memorial Hospitals and th St. Joseph County Medical Society.

Association News

XECUTIVE COMMITTEE

November 19, 1966

Present: Ralph V. Everly, M.D., chairman; urton E. Kintner, M.D.; Eugene S. Rifner, .D.; G. O. Larson, M.D.; Lowell H. Steen, .D.; Ottis N. Olvey, M.D.; Lester H. Hoyt, .D.

Frank B. Ramsey, M.D., editor of *The urnal*, Robert Hollowell, attorney, and mes A. Waggener, executive secretary.

embership Report

Number of members as of December 31, 1965	4,394
1966 members as of October 31, 1966:	
Full dues paying	3,874
Residents and interns	116
Council remitted	51
Senior	310
Honorary	3
Military	38
Total 1966 members as of October 31, 1966	4,392
Number of members as of October 31, 1965	4,376
Gain over last year	16
Number of AMA members as of October 31, 1966	4,276
Total 1965 AMA members as of October 31, 1965	4,271
Gain over last year	5

1966 AMA members:	
Dues paying	3,760
Exempt, but active	516
	4,276
Number who have paid state dues but not AMA dues as of October 31, 1966	116

eadquarters Office

The secretary reported that the State of liana Employment Security Division was questing a payment of $184.77 in order to luce the association rate from .03% to %. The committee recommended that s matter be submitted to the auditor for termination if this would be an investment ing, and this was approved on motion ly made and taken by consent.

Membership in the Indiana State Chamber Commerce in the amount of $1,000.00 was proved on motion of Drs. Steen and Rifner.

easurer's Office

The treasurer had no report.

ilding Matters

On motion of Drs. Rifner and Steen the retary was instructed to buy a new flag.

gislation

Local: The implementation of Title XIX the question as to what advice the association should supply its members concerning the handling of welfare cases under Title XVIII were discussed, the feeling being that the association had an obligation to further advise the membership of the facts. Upon motion of Drs. Rifner and Steen, this matter was referred to the Council for action.

Organization Matters

The recommendation of the Commission on Voluntary Health Agencies was read for the information of the committee.

A letter from Dr. Joe Davis concerning membership on the Joint Committee for the Improvement of Patient Care was read and upon motion of Dr. Rifner, taken by consent, this was to be referred to the Commission on Inter-Professional Relations.

Report of Dr. Schuster on his attendance at the AMA Conference on Quackery was reviewed for the information of the committee.

Report of Dr. Steen concerning his attendance at the conference of the American Academy of Pediatrics was reviewed for the information of the committee.

Report from the AMA concerning the Medic Alert Foundation and a letter from Mr. T. Leonard Terry, manager of the Mutual Life Insurance Company of New York, South Bend office, were reviewed and this correspondence was ordered referred to the Commission on Voluntary Health Agencies, on motion of Drs. Rifner and Kintner.

A letter from the Elbert (Georgia) County High School requesting use of the association mailing list for a survey of attitudes toward memorialization in cooperation with the Elberton Granite Association was turned down on motion of Drs. Steen and Larson.

A letter from Dr. Glenn W. Irwin, Jr., addressed to Dr. Lester Bibler, concerning the AMA curtailment of loans to medical students, was reviewed and upon motion of Drs. Steen and Larson, this matter was to be referred to the Student Loan Committee.

A letter from the AMA concerning plaques to Indiana physicians who have served in Viet Nam was read and by consent this matter was to be referred to the Council with the recommendation that the plaques be awarded at the time of the January Council meeting.

Medicare

A special bulletin on Medicare from the Ohio State Medical Association was reviewed for the information of the committee.

It was reported that the Blue Shield revised contract with the State Department of Public Welfare had not been negotiated. This report was for the information of the committee.

Correspondence between Congressman Ancher Nelsen and Ellen Winston was reviewed for the information of the committee.

Blue Cross Medicare Bulletin No. 60 concerning certification was reviewed for the information of the committee.

Report of the action taken by the Indiana Hospital Association in which discontinuance of certification and re-certification was recommended was read for the information of the committee.

The correspondence between the headquarters office and the various departments of the Social Security Administration concerning assignments in welfare cases was reviewed for the information of the committee.

The secretary presented a draft of a proposed report of the AMA Council on Medical Service and their intended definition of "usual" and "customary," together with his comments concerning the report. He also reported on the action of the Pennsylvania State Medical Association in adopting the prevailing fee concept for their programs in their state, and also presented a suggested resolution for consideration for presentation at the Las Vegas meeting. Upon motion of Drs. Rifner and Larson, all of these matters were referred to the Council.

Journal

A letter from the State Medical Journal Advertising Bureau, Inc. concerning an advertising contract for Eli Lilly and Company was reviewed and the secretary was instructed to accept this contract on a trial basis.

Future Meetings

Plans for the AMA meeting in Las Vegas were reviewed and the Executive Committee is to meet with the AMA delegates and alternates at 7:30 a.m. on Monday, November 28, Tuesday, November 29, and Wednesday, November 30.

Invitation from the AMA to send a representative to the conference on Medicine and Religion to be held on Saturday and Sunday, February 18 and 19, 1967, was reviewed, and Dr. Steen will represent the association at this meeting.

An invitation to send a representative to the 20th National Conference on Rural Health, to be held March 10 and 11, 1967, in Charlotte, North Carolina, was reviewed, and upon motion of Drs. Rifner and Kintner, no representative is to attend this meeting.

There being on further business the committee adjourned, to meet again on Monday, November 28, 1966, in Las Vegas.

COMMERCIAL ANNOUNCEMENTS

AVAILABLE: Equipped physician's office available immediately due ta death. Community af 2,600; drawing area af 8,000. Practice active 20 years. New lacation two years aga. Cantact Robert A. Cox, D.D.S., 3 Parkview Court, Cambridge City, Ind. Phone 35191 for details.

PHARMACIST desires to start professional pharmacy in new or established medical building. Interested physicians please write Box 332, The Journal, ISMA, 3935 N. Meridian St., Indianapolis, Indiana 46208.

SURGEON: Associate needed in proctology, board certified or eligible, American Board of Surgery, who will limit his field to colo-rectal surgery; or American Board of Colon and Rectal Surgery. Write Box 327, The Journal, ISMA, 3935 N. Meridian St., Indianapolis, Ind.

INDUSTRIAL MEDICINE: INTERNIST OR GENERALIST. Active career pasition in Cincinnati for healthy physician with large progressive company nated for excellent emplayees, wark canditions and benefits. An Equal Opportunity Employer. Write Medical Director, Procter & Gamble Company, Cincinnati, Ohio 45217.

PEDIATRICIAN: Group of 21 specialists in need of a second pediatrician. Salary for 18 months, then full membership. No investment. Unique system combines advantages of private and group practice. Further information. Bradley D. Adams, M.D., 104 W. Clark St., Champaign, Ill.

WANTED: General practitioner far town of 1,200 located approximately 70 miles southeast of Indianapalis and 49 miles west of Cincinnati on U.S. 50. Population of 10,000 within 10 mile radius. Spaciaus recently constructed clinic building available. Only one other physician practicing in this area. Reasonable expectation of $70,000 per year gross incame. Write William Culley, Community Service Committee, Versailles, Indiana 47042.

GENERAL PRACTICE AVAILABLE NOW due to death. Fully-equipped and furnished 5-room suite at no cost in professional building. All services furnished. Doctor urgently needed. Inquire R. C. Corson, 555 W. 92nd St., Indianapolis. Phone 846-8524.

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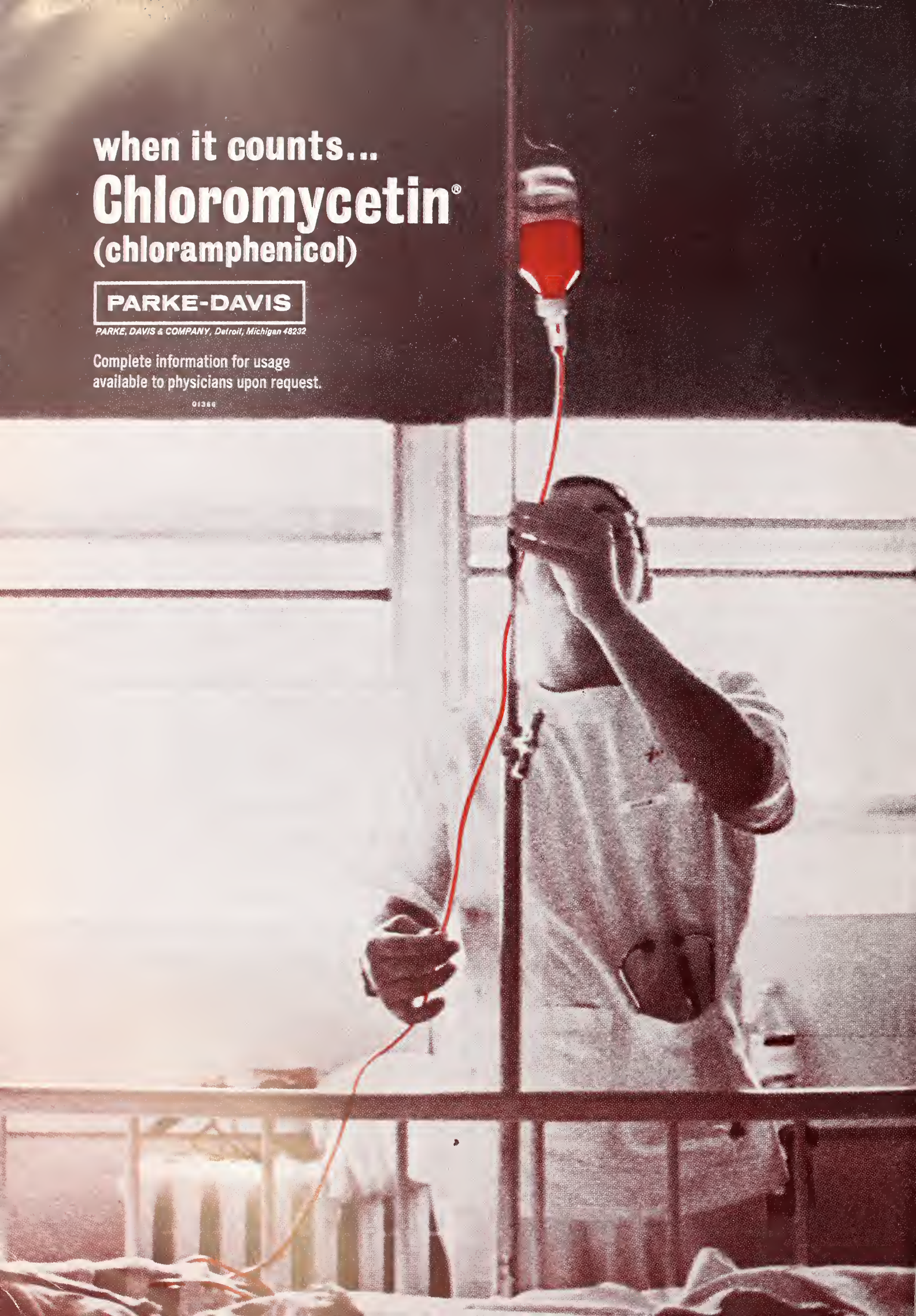
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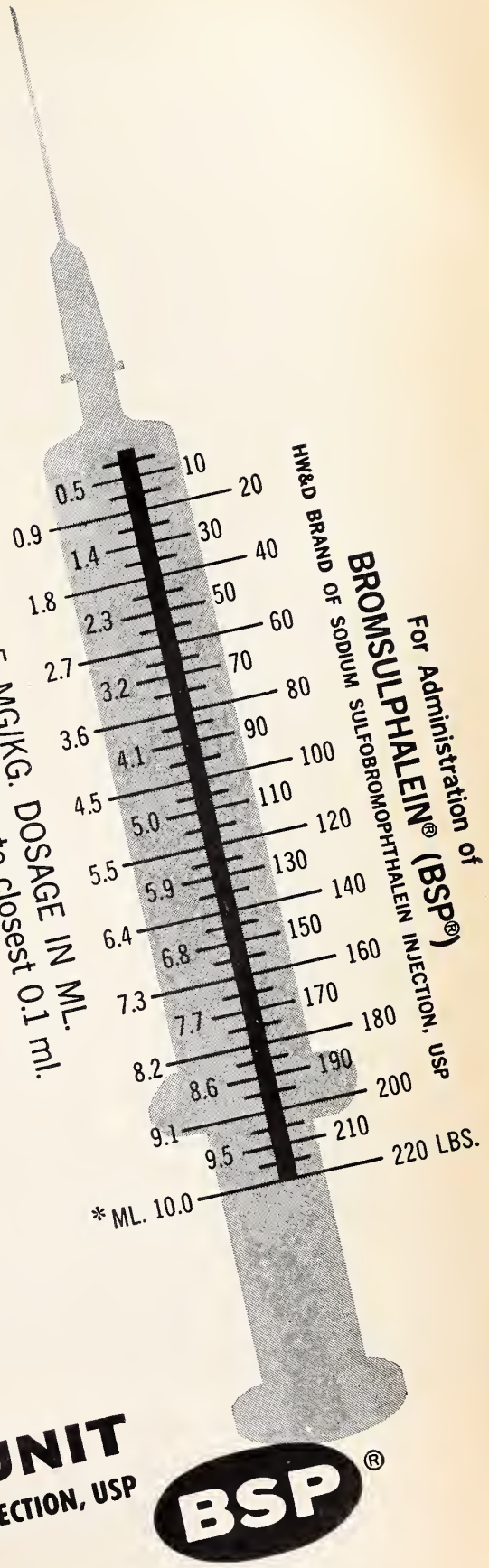
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The Journal
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Entered as second closs matter January 25, 1933, at the Postoffice at Indianapolis, Indiana. Copyright 1967 by the Indiana State Medical Association. Published monthly at 3935 N. Meridian, Indianapolis 46208.

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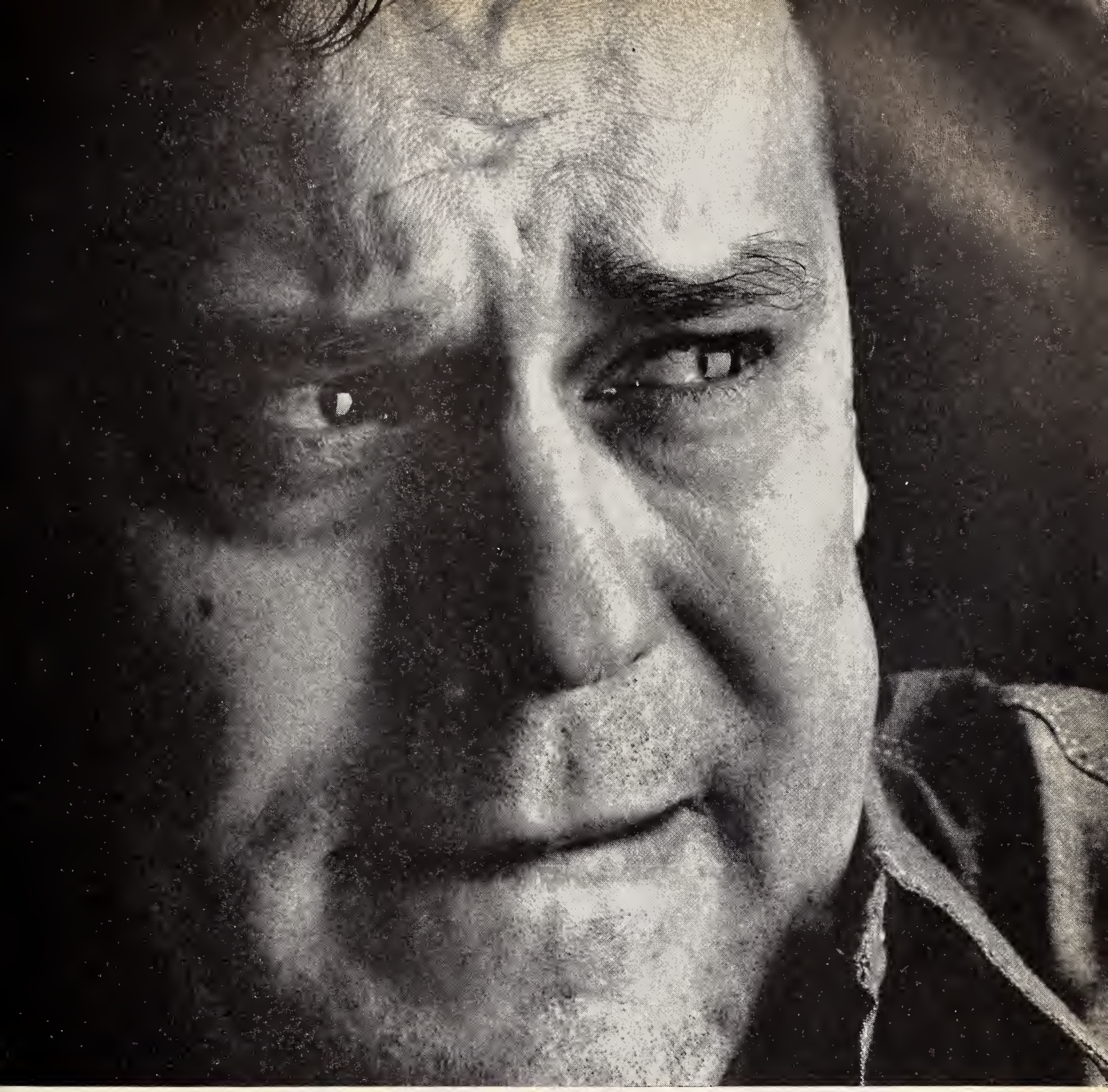


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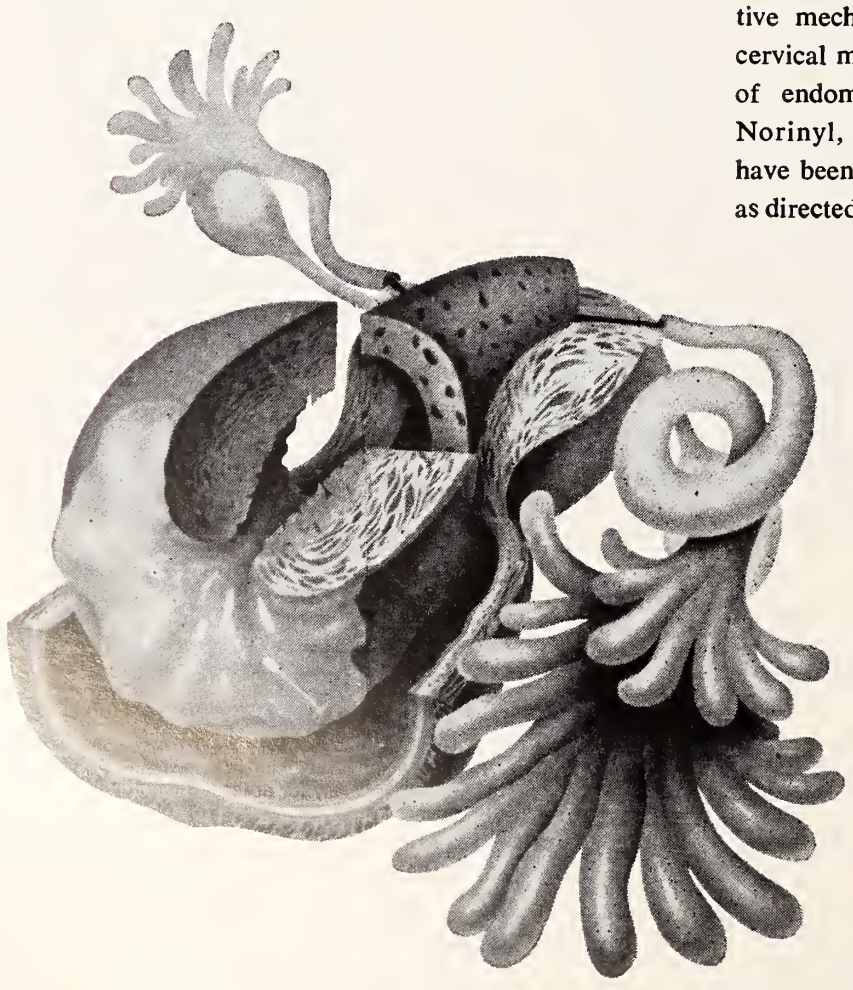
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Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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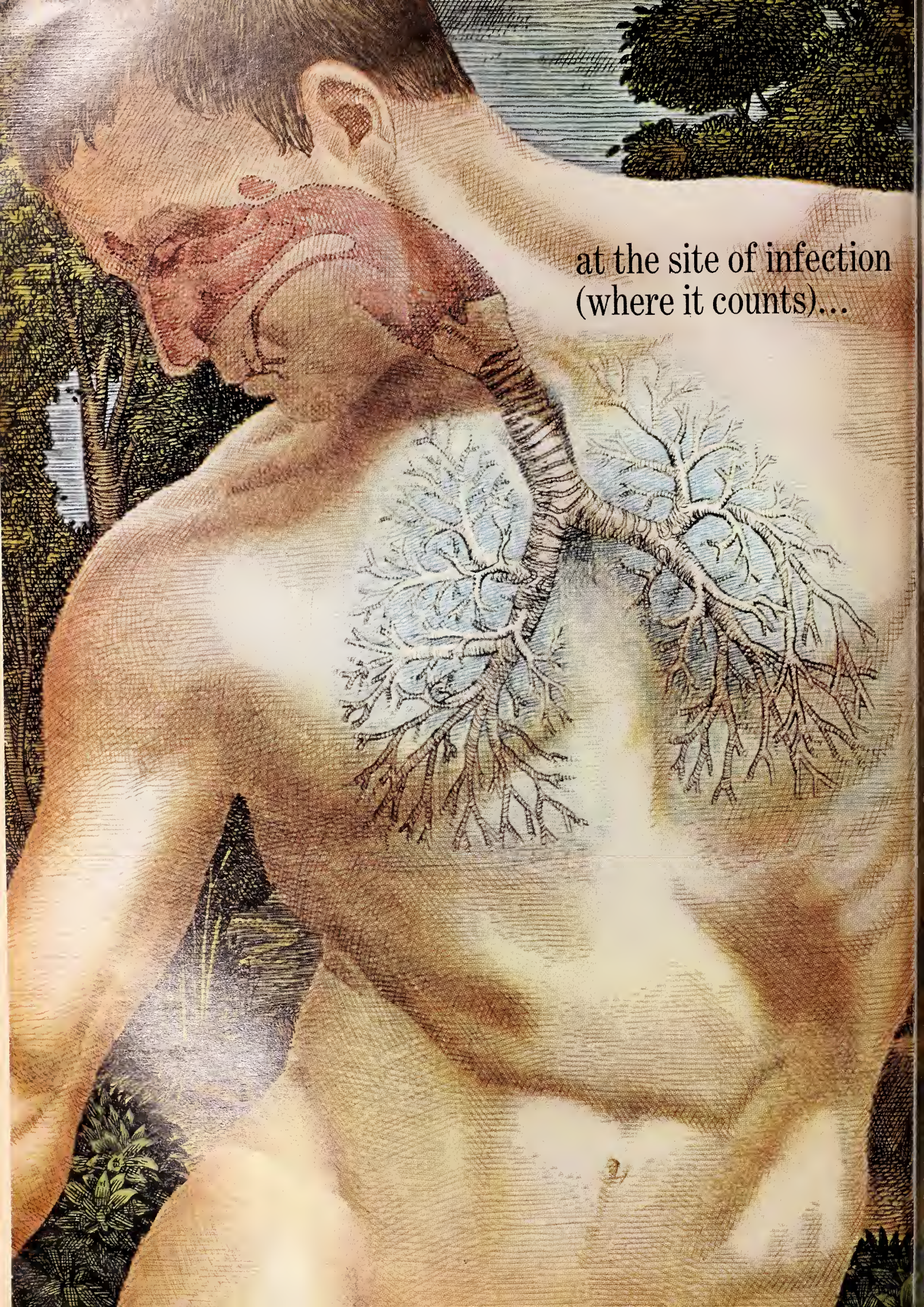
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Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/ the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings w characterized by increased direct-reacting bilirubin, eleva alkaline phosphatase levels, negative or weakly positive ceph flocculation and thymol turbidity tests, elevated serum gluta oxalacetic transaminase levels, peripheral eosinophilia, and n mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months, patients with rheumatic fever have taken prophylactic dose 0.5 Gm. daily for two years without difficulty. In one group 144 patients who received the drug daily for two years, no ja dice was noted. It was of interest that members of six of th patients' families, who were not taking the drug, had episc of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels w determined in a group of fifty-four adults and children who t 250 mg. of Ilosone daily for an average of sixteen months rheumatic fever prophylaxis. The results were compared v those of a similar group of forty-four patients who received p icillin. There were no cases of jaundice in either group. Eleva of SGPT and serum alkaline phosphatase levels during the cou of treatment was observed in one patient treated with Ilos and in two patients treated with penicillin. Seven other patie in the group receiving Ilosone and four others in the penici group showed elevations in one of the tests at some time dur administration of the drugs.

Very satisfactory therapeutic results, without toxicity, w reported in 102 pediatric patients who received short-term (1 day) courses of Ilosone in the treatment of streptococcus in tions. Results of liver function tests in these patients were c parable to those in a similar control group who had recei penicillin.

Gastro-intestinal disturbances not associated with hepatic fects are observed in a small proportion of individuals as a re of a local stimulating effect of the medication on the aliment tract; however, the normal intestinal gram-negative bacte flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the of erythromycin, there have been occasional reports of urtica skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of b weight, the usual dosage is 5 mg. per pound every six hours; children twenty-five to fifty pounds, 125 mg. every six ho (Tablets Ilosone Chewable should be chewed or crushed swallowed with water.)

For adults and for children over fifty pounds, the usual dos of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythrom therapy should be considered.

In the treatment of syphilis, the recommended total dosag 20 to 30 Gm. given in divided doses for a period of ten to fift days. Close follow-up of the patient is necessary since eryth mycin drugs have not had adequate evaluation in all stage syphilis. Examinations of spinal fluid are recommended as p of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days recommended. In the treatment of gonorrhea, patients wit suspected lesion of syphilis should have a dark-field examina before receiving antibiotics, and monthly serologic tests sh be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to ba in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10- size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equival to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packa

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 196

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When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes distressed about her condition.

She will breathe easier when you prescribe Novahistine LP.

Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution patients who operate machinery or motor vehicles that drowsiness may result.

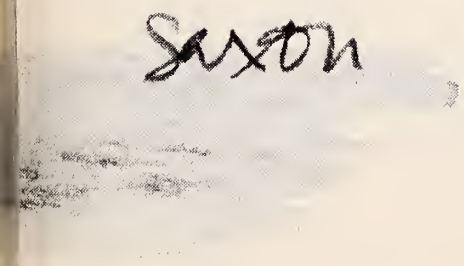
Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

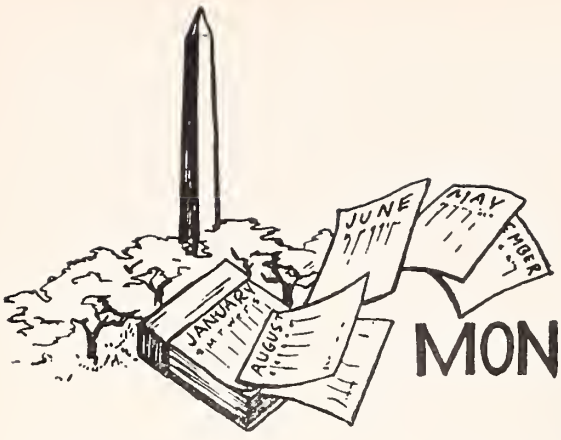
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NOVAHISTINE® LP

For relief of nasal congestion.







This summary of what is happening in Washington is prepared by AMA's Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—At a cost of nearly $1 billion, more than six million older persons got hospital and medical benefits during the first six months of the medicare program.

SOCIAL SECURITY Commissioner Robert M. Ball expressed satisfaction with the overall operations so far of the health insurance program for the elderly. But Ball warned of bed shortages in the nation's capital, in various New England states, and in most rural areas when a new medicare benefit of nursing home care went into effect Jan. 1. He estimated that from 50,000 to 60,000 beds would be needed for extended care in nursing homes.

THE commissioner recommended a number of changes in the program:

—He urged that medicare benefits, which apply to persons 65 or older, be extended to 1.3 million disabled persons.

—He said the major improvement needed in the Social Security program is an "across-the-board" increase in benefits. Overall benefits to be paid out in 1966 will rise from $21 billion in 1966 to $25 billion in 1967, he noted. President Johnson has announced he will seek a boost of about 10% in Social Security benefits in the next Congress.

BALL'S REPORT on the first six months of medicare included:

—About 2.5 million elderly persons received free hospital care and 3.5 million benefited from medical services.

—Since medicare began July 1, 1966, hospital occupancy increased five percent, as expected. Thirty percent of all hospital beds were occupied by those 65 or older at the end of 1966.

—About 6,700 hospitals now are participating in medicare. About 250 hospitals were excluded because they did not meet minimum standards, and 75 hospitals because of racial discrimination.

—Payments to doctors and skilled medical personnel, such as radiologists, have taken too long.

—Overcrowding of hospitals in various "isolated" incidents.

—Almost all of 17.5 million persons who signed up for additional medical insurance at a premium of $3 maintained their payments.

SEVENTEEN hospitals in five states declared ineligible for federal funds because of failure to comply with provisions of the 1964 Civil Rights Act were granted public hearings by the Public Health Service in Alabama, Louisiana, Mississippi, South Carolina and Texas.

Continued

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That's what prompted preparation of research-tested scientific diets which are offered to you free. They're a realistic balance of the 4 food groups —meat, bread and cereals, fruits and vegetables and dairy foods. They're the kind of diets you'd write yourself, if you had the time.

Send for them. The shape of the nation is up to you.



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Position

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DAIRY COUNCILS IN INDIANA: Evansville, Indianapolis, Kokomo-Peru, South Bend. Send requests to 50 S. Parker, Indianapolis, Indiana.

PROJECT WEIGHT WATCH

FACTS, NOT FADS

"DISCRIMINATORY practices found at the hospitals include the segregation of patients . . . an absence of Negro physicians . . . and the segregation of training facilities," a PHS spokesman said.

SEN. GEORGE D. AIKEN, (R., Vt.), proposed a nine-point program to liberalize benefits under the government's medicare plan for action by Congress. One would extend medicare drug coverage to prescriptions for old people whether or not associated with hospital confinement. A similar plan was included in a Senate-passed tax bill last summer but was killed in a Senate-House conference. Other Aiken proposals would eliminate deductible and co-insurance features, waiting periods and enrollment deadlines from the medicare plan, lower the 65 year age requirement for women to 62, and permit payment of medical specialist fees customarily provided by hospitals.

MORE PEOPLE BEING CURED OF CANCER

THE National Advisory Cancer Council reported that, although cancer is still on the increase, more people are being cured of it than ever before.

THE REPORT—titled "Progress against Cancer"—shows that 30 years ago there were 144,774 cancer deaths in the United States, a crude rate of 112.4 per 100,000 of the population. In 1967, an estimated 305,000 deaths will occur, bringing the rate up to 153 per 100,000, according to the report. On the other hand, there has been an improvement in the cure rate. In 1937, less than one in five cancer patients survived five years without evidence of disease, but currently about 35%, or better than one in three are saved. There is good reason to believe, the report states, that this favorable trend will continue.

INTENSIVE CANCER study of six types of cancer is recommended: of the breast, which has shown little improvement in incidence or mortality for about 30 years; the lymphomas, one of which, Hodgkin's disease, has been cured in 40% of cases in a localized stage; chronic leukemia and multiple myeloma, for which drug treatment should be greatly improved; lung cancer, which continues to increase, particularly in both men and women smokers; and uterine cancer, which has been significantly reduced and might be almost totally eradicated by early detection with the "Pap" smear.

1966 LOWEST YEAR FOR NEW PRESCRIPTION DRUGS

EXPENDITURES on prescription drug research and development reached a new high, but fewer new products actually reached the market in 1966 than during any single year on record.

C. JOSEPH STETLER, president of the Pharmaceutical Manufacturers Association, said that the situation was attributable to several factors, including difficulties encountered under federal drug regulations. He said that the 1962 federal drug amendments had necessitated increasingly

lengthy, costly periods for manufacturers to develop technical information required by the government. Stetler added that more time also has been required by the Food and Drug Administration for processing applications.

TOTAL research and development expenditures during 1966 were estimated by Stetler at about $400 million. He said that only 11 basic new products had been marketed in the year, compared with 23 in 1965, 17 in 1964, 18 in 1963, 28 in 1962, and 41 in 1961. The peak year was 1959 when 63 new products were introduced.

A PMA SURVEY shows that a principal focus of the million-dollar-a-day search by industry for new pharmaceuticals is on drugs acting on the central nervous system and sense organs. These include sedatives, stimulants, tranquilizers and analgesics.

STETLER said that such drugs accounted for $37.1 million or 19% of the $194.7 million spent in 1965 on applied research and development by 42 of the nation's largest prescription drug firms. ◄

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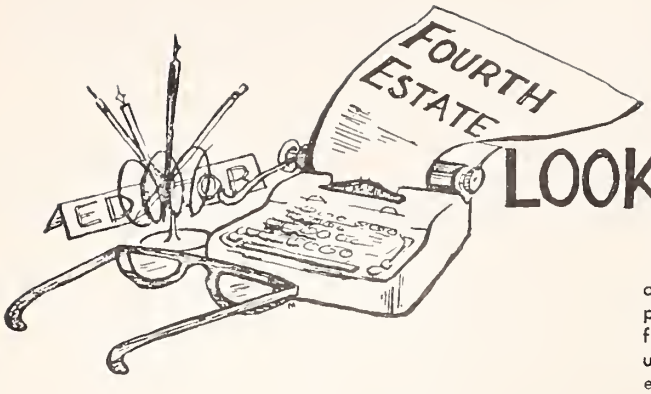
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Admissions are arranged through referral to any active staff psychiatrist.

All general medical and surgical specialties in the community are available through physicians on the open consulting staff.



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

Professional Jealousy

The knowledgeable public has long been cognizant of the existence of professional jealousy between the less mature of the community's medical society.

In fact, too often innocent patients have experienced the awkward embarrassment of being caught in the middle of such disconcerting circumstances . . . situations not of their own making.

However, never in the history of this newspaper have we witnessed, or do we have knowledge of a more unsophisticated exhibition of professional jealousy than is contained in the context of a letter to Managing Editor Don R. J. Cramer.

The letter, purportedly voicing sentiments of members of the Kosciusko County Medical Society, was written by Dr. R. S. Snider, the organization's secretary. It censors this newspaper's reporters for the inclusion of the names of physicians in news stories of general public interest.

Though not specifically mentioned, such registered protest is assumed to have been precipitated by the society's dislike for a normal series of news bulletins reporting the recent condition and progress of former school superintendent Carl W. Burt.

Mr. Burt, for 23 years head of the community's public educational system, had suffered a stroke a few months after his announced resignation. Critically ill, he was hospitalized locally, members of his family summoned to his bedside from afar.

In describing the patient's condition, a reporter named attending physicians Thomas F. Keough and Dan Urschel as his authentic medical source.

Apparently smarting under such publicity accorded their two professional colleagues for issuing such bulletins, Snider charges this newspaper with violating "their" (the doctors') code of ethics; however, could that be?

His complaint implies that the reporter wrote in poor taste; that such anonymous terms as "doctor or physician" should have been used in place of the specific names of Keough and Urschel.

Snider's letter appears slightly out of reach of reason. Moreover, its content makes one stop to ponder whether or not the existing fibre of the medical society is fully competent to administer the medical needs of the community while simultaneously allowing themselves to engage in such a picayunish display of juvenile-like emotion.

We submit that Snider et al. confine their practices to administering to the patients' medical needs and less to prescribing what information the public is entitled, or not entitled to know.

We cannot believe that most enlightened physicians would subscribe to the selfish, self-centered attitude expressed in Dr. Snider's letter.

Let it now be known that *The Times-Union* will defend the public's right to authentic information, quoted by a knowledgeable source, whenever such basic American right is threatened by bureaucratic secret-session, the courts or misguided professional judgment.

We consider the slow erosion of the "people's right to know" one of the greatest dangers to our way of life today.—*Warsaw Times-Union*, Nov. 30, 1966.

Physician Comments

Editor, The Times-Union:

The problem which has recently arisen concerning the publication of doctors' names in connection with specific cases is one which has been present with us for a long time, and is certainly not peculiar to our own area.

The newspaper reporter, doing his job correctly, likes to have the most specific information possible. On the other hand, the physician, practicing according to his Hippocratic oath, prefers to remain anonymous in public reference to his care of individual patients.

As was noted in your comments on Wednesday night, there are certain instances (most strikingly demonstrated by the illness of the President of the United States in recent years) where specific reference to a physician, or to a number of physicians, is an extremely important part of the news. Likewise, as you stated, there may be local instances where it would appear to the public interest that the information concerning certain important individuals come directly from specific doctors.

Without attempting to decide the correctness of the procedure in the case listed, I want you to know that Dr. Snider's remarks were not made out of professional jealousy, nor was the

Continued

The AMBAR SCRAPBOOK of Obesity Oddities
FACT & LEGEND



GALLSTONES HAVE BEEN FOUND IN 60% OF PATIENTS WHO WEIGH MORE THAN 300 POUNDS, 45% HAVE DIABETES, AND 15-TO-20% HAVE HIGH BLOOD PRESSURE.
SOURCE: DUNCAN, G.G.: SCIENCE NEWS LETTER, 83:403 (JUNE 29) 1963.

NAPOLÉON BONAPARTE
LOST THE BATTLE OF WATERLOO BECAUSE HE WAS TOO FAT!

ACCORDING TO THE NEW YORK TIMES OF APRIL 13, 1890, THE DEFEAT OCCURRED BECAUSE HE FAILED TO CHECK HIS INTELLIGENCE INFORMATION. "IT WAS A MATTER OF MERE INDOLENCE AND THIS INDOLENCE WAS CAUSED BY FAT."
SOURCE: JAMA 186:65 (OCT. 5) 1963.



THE BOOK **"PRAY YOUR WEIGHT AWAY"** URGES READERS TO "ASK GOD TO HELP YOU LIKE EXERCISE" FOR 15 MINUTES A DAY.
SOURCE: REV. C.W. SHEDD: NEW YORK, LIPPINCOTT, 1958.



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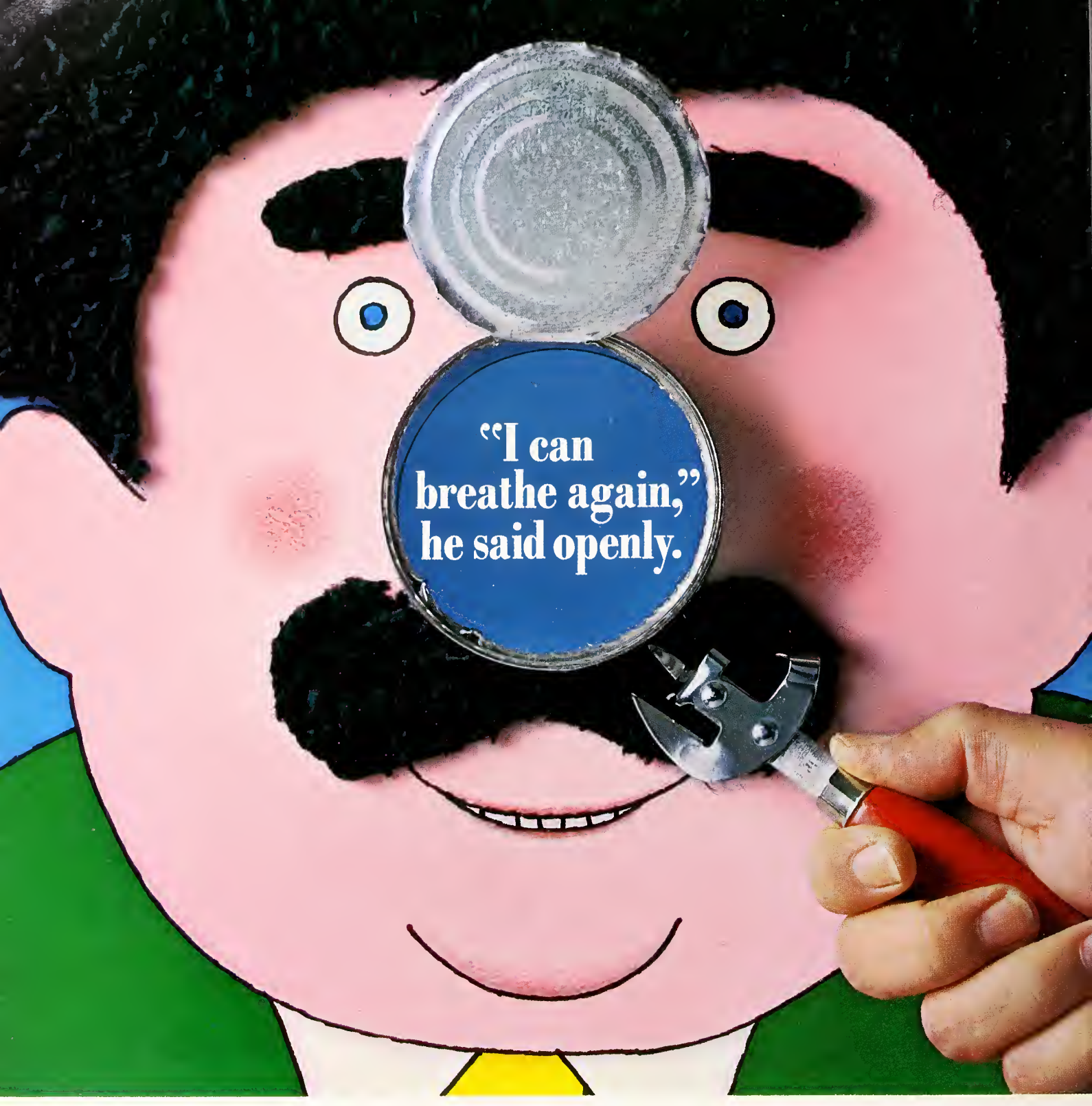
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Kosciusko County Medical Society motivated by this reason. In fact, Dr. Keough and I were present at that meeting, and both of us agreed heartily with the suggestion that *The Times-Union* be asked to refrain from specific references whenever possible. (This is not a matter of closing ranks, after the event, because it is my memory that I may have made the original motion to the group concerning this letter to be sent by the secretary of the organization.)

With the practice of medicine being as deeply personal as it is, a certain amount of personal jealousy or disagreement cannot fail to appear, any more than it can fail to appear among newspaper men. However, I do believe that the editorial did an injustice to a very fine group of capable, competent and sincere young physicians, who are practicing in Warsaw and surrounding area at this time. As a consultant, I visit many other hospitals in this area, and I feel that we are very fortunate in having the caliber of men who are in the practice of medicine in Kosciusko County.

In conclusion, I must repeat again that this was truly one of those situations involved in the all too vague field of "medical ethics," and was not brought on by any professional jealousy or any discord among the members of the medical profession in the county.

Yours sincerely,
DAN L. URSCHEL, M.D.
Mentone, Ind.—*Warsaw Times-Union*, Dec. 5, 1966.

Leadership

It takes good leadership to weld a legislative body into an effective, representative instrument of government. And good leadership is precisely what the Indiana House of Representatives will enjoy in 1967.

Both parties chose wisely in picking the top House leaders. Dr. Otis R. Bowen of Bremen, the Republican choice for speaker of the House, proved his skill and dedication in 1965 when, as leader of a tiny minority, he saw to it that a Republican voice was heard in the House's legislative councils.

Now that the GOP has control of the House, it is fitting that Dr. Bowen take over the speaker's job. We congratulate him on achieving the post in the face of a strong challenge, and we congratulate the House Rpublicans for choosing him.

Our congratulations also go to the House Democrats and to Mishawaka's Rep. Richard C. Bodine, the new minority leader in the House. Mr. Bodine's abilities also were demonstrated amply in 1965, when he was speaker of the House.

Mr. Bodine and Dr. Bowen have worked together with mutual respect and understanding. We look forward to an effective House of Representatives under their guidance in 1967.

In the Senate, where Democrats retain control, Sen. Jack E. Mankin of Terre Haute will again serve as majority leader, a post he filled ably in 1965. The only new face among top leaders in either branch of the General Assembly is Sen. Marlin K. McDaniel of Richmond, who will be Republican Senate minority leader.

All the party choices, we feel certain, will put the good of Indiana above partisan considerations in guiding the destinies of the 1967 General Assembly.

They have their state's best wishes and high hopes as they prepare to convene the legislature—*South Bend Tribune*, Nov. 30, 1966.

Protection Against Influenza

There's still time to protect yourself and your family against influenza this winter. So says Dr. E. S. Rifner, president of the Indiana State Medical Association.

Pointing out that public health officials had forecast that relatively little influenza will be diagnosed in 1966-67, he said that it would still be wise for individuals to get "flu" shots.

This is especially important for those individuals who fall into the following high risk categories:

1. Persons of all ages suffering from chronic diseases, such as rheumatic heart disease, other heart and circulatory problems, respiratory ailments such as asthma and emphysema, and diabetes.

2. Persons in older age groups. Influenza deaths are higher in those past 45 and much higher in those beyond 65 years.

3. Pregnant women.

4. Patients in nursing homes and chronic disease hospitals.

Immunization is important, too, for individuals in the medical and health services, in industries and large institutions where absenteeism is a concern and in education and communication fields.

Dr. Rifner further points out that if a flu epidemic should hit your community, however, and you are not immunized, you stand a good chance of being among the 10-25% who will get the disease.

If yours is a normal case of "flu," you'll feel miserable but you won't be seriously ill. However, there can be complications — even fatal ones. Pneumonia is the most serious one.—*Kokomo Tribune*, Dec. 1, 1966.

New Medical School

The 1967 Indiana legislature should take the initial steps for creation of a new medical school to be located adjacent to the University of Notre Dame campus in South Bend. Studies have been made, facts gathered, and proposals offered and no more pondering of the need is necessary. The decision should be made without fail by the lawmakers who gather in January for the 61-day session. It would be a grievous mistake to postpone a decision on the grounds that "more time is needed to study the matter." There has been plenty of "study." Any deferring of a decision will simply be needless buck-passing.

There is no possible doubt that Indiana needs more medical school fa-

cilities. The 23 northern Indiana counties now have a shortage of 253 doctors if the total is measured by federal standards. There are also shortages in other parts of Indiana. The state as a whole is far down the list in the number of doctors per unit of population. Part, although not all of the shortage, is due to the fact the state's one medical school, the I.U. school at Indianapolis, does not graduate enough doctors. A number of those who do graduate annually go out of the state to practice.

To give quality medical education it is important to keep classes small. The medical schools themselves should be kept relatively small. Indiana's, on the other hand, is one of the nation's largest. Any expansion of the present school at Indianapolis, as is proposed by some authorities, could be at the expense of quality education. The logical step, and one advocated by many medical authorities, is to create a new school. And the best location for a new school is the South Bend location.

Northern Indiana is an area of swift growth which already has about one-third of the state's population. The South Bend location is central to the entire northern area. In the University of Notre Dame it has one of the three universities in Indiana, the others being Purdue and Indiana, which offer graduate level science programs. South Bend itself offers many medical, cultural and educational facilities.

Because it is centrally located in an area of heavy population, where growth is rapid and will become even more so, and because Notre Dame will donate a site, the South Bend location for the medical school is superior to either Evansville or Muncie where Ball State university is located. Because the need for a new state medical school is pressing, the legislature should make a decision so necessary before preliminary funds can be made available. And the South Bend site should be voted.—*LaPorte Herald-Argus*, Dec. 1, 1966.

Should State Of Indiana Provide For More Doctors?

Although the School of Medicine of Indiana University faculty, its hospital connections, and its other facilities, have been expanded in recent years, there still is a need for the education and training of additional physicians for service in Indiana.

The new hospital now being erected in the Medical Center complex on East Michigan Street in Indianapolis will enable the university to train a greater number of physicians. This will place the Indiana University School of Medicine among the top half dozen or so schools of medicine in the nation in number of physicians graduated annually. I.U. is also among the medical schools of top standards.

Those who are not convinced that there should be additional school of medicine facilities provided by the state of Indiana say that the difficulty stems from the fact that so many of the Indiana University School of Medicine graduates leave the state and become valued physicians in neighboring states. A large number proportionately practice in New York, California and other high-income areas.

Even so, surveys have shown conclusively that there is a sound basis for providing medical education on a broader scale. There is need for more centers and for providing a greater number of medical graduates each year by the state of Indiana.

A special study committee appointed in 1963 spent several months on the subject, surveying the situation from practical economic, academic and future-needs standpoints. Findings of the committee included recommendations that there be an additional school of medicine, and that it be located in Muncie. Hospitals in Muncie, along with proximity to the larger growing population areas and other factors were listed as basis for the findings.

Evansville and South Bend civic leaders also have put on organized campaigns for bringing new schools of medicine to their cities. Hospitals of high standards both in South Bend and in Evansville are pointed to as strong reasons for building schools of medicine in those cities. South Bend leaders also point out that a large pr portion of the population of the sta is in northern Indiana.

Administrators and doctors of th Indiana University School of Medicir suggest that the need for more phys cians can best be met by the Indiar University School of Medicine estal lishing branches of the Indiana Un versity Medical School in the populou centers such as South Bend, and Evan ville, and possibly Muncie.

Building up a school of medicir of the proper standards on a soun basis takes time.

Therefore members of the stud committees of the past three years an other citizens of the state who are co vinced that additional physician-trai ing education facilities are needed a urging that the 1967 Indiana Gener Assembly, which will convene on Ja 5, give serious consideration to th problem and take action toward pr viding for the needs of the future.

The needs are here now, it claimed, and action should no longe be postponed.—*Corydon Democra* Nov. 30, 1966.

For Medical School At South Bend

The 1967 Indiana General Assembl should meet the issue of new medic school facilities for this state squarel

There should be no passing of th buck to a "blue-ribbon out-of-stat committee," as suggested by on source.

The need for more Hoosier phys cians is too urgent to permit furthe delay—especially remembering ho long it takes to establish a new med cal school and begin the graduation c more M.D.s.

All the pertinent facts have been a sembled and studied for some time These facts point to the same conclu sion *The Truth* has espoused from th start of this debate:

Indiana should have a second med cal school, and it should be located i our own area of northern Indiana specifically at South Bend.

New medical school facilities shoul

e where most Hoosiers need — and vill be needing — more doctors. That's orthern Indiana, which has had rapid opulation growth in recent years and, vith its dynamic economic expansion, s destined to have much more soon.

The Indiana University Medical chool at Indianapolis (the state's only uch institution now) graduates about 75 students a year.

Most of these graduates either settle n the immediate Indianapolis area or eave the state to practice elsewhere.

How does that help northern Indina? How would it help northern Indina if the assembly were to adopt the lea of just enlarging the I.U. medical chool itself?

The 23 northern Indiana counties urrently have a shortage of 253 docors, according to suggested federal tandards.

Dr. Glenn W. Irwin, I.U. Medical enter dean, recently disclosed in a peech that I.U.'s plan for medical ducation will not meet the enrollment ressures resulting from population ncreases.

Dr. Irwin said that "our own faculty asn't been enthused" about substantilly increasing the number of students Indianapolis. No wonder, since iedical faculty members stress the imortance of comparatively small asses to attain maximum quality edical education.

In fact Dr. Irwin said that if the ate's General Assembly provides adtional support for his institution and the same time begins creation of a cond medical center, "I'm for it."

A bill is to be submitted from here the 1967 assembly requesting initial nds for creation of a medical school ljacent to the University of Notre ame.

South Bend is superior to the other ndidate areas for a second medical hool — Muncie, Lake County and vansville — from the overall standoint of geographic location, educaonal, scientific and cultural facilities.

Only three universities in Indiana, the way, have graduate level science ograms: Nearby Notre Dame, Indiana and Purdue. That would be a big plus for a second medical school adjacent to Notre Dame.

Such a location would be the ideal solution. Such a new school could be operated either by I.U. or as an independent institution; there would be advantages both ways but either type operation would be welcome.—*The Elkhart Truth*, Nov. 25, 1966. ◄

Weekend Carnage

More than 50% of all highway deaths in 1965 occurred during the weekend from Friday through Sunday, according to The Travelers Insurance Companies.

The most dangerous day?

Saturday.

Based on Travelers' report, 21.9% of all fatal highway accidents occurred on Saturday. In addition, 15.4% of all traffic deaths occurred on Friday and 18.7% on Sunday.

The total number of persons killed in 1965 stood at 48,500 by year's end. More than 4,000,000 men, women and children were injured. The biggest percentage of those injured in auto accidents also occurred during the weekend.

The most dangerous hours on the highways, according to Travelers, are those between 5 and 8 p.m. During that time, nearly 20% of all fatal accidents occurred. This also holds true of the number of injured, says Travelers. Last year more than 19% of all highway mishaps causing injury occurred during this same three-hour period.

* * * *

Favorable weather is no safeguard against highway accidents, says The Travelers Insurance Companies. The overwhelming percentage of all accidents in 1965 occurred during clear and dry weather.

* * * *

Saturday is the most dangerous day to drive, according to a Travelers Insurance Companies report. Nearly 22% of all fatal traffic accidents occurred on that day in 1965.

Computer at the Bedside?

As to the evaluation of medicines for efficacy and safety, the computer is not the final and perfect answer, useful though it is. What the physician feels and perceives at the bedside of his patient may not fit into the square, or oblong or round hole of the punch card; but his observations are often a surer guide to the usefulness of a particular medicament for a particular patient.

In the interest of the patient — that individual so unique that there is not another entirely like him in the whole wide world — we must be careful lest the scientific pendulum swing too far in the direction of mechanistic technology. — J. Mark Hiebert, M.D., to University of Kansas Pharmacy Colloquium, April 13, 1966.

Statement of ownership, management and circulation (Act of October 23, 1962; Section 4369, Title 39, United States Code)

1. Date of filing: September 22, 1966.
2. Title of Publication: THE JOURNAL of the Indiana State Medical Association.
3. Frequency of issue: Monthly.
4. Location of known office of publication: 3935 N. Meridian St., Indianapolis, Indiana 46208.
5. Location of the headquarters or general business offices of the publishers: 3935 N. Meridian St., Indianapolis, Indiana 46208.
6. Names and addresses of publisher, editor, and managing editor: Publisher, The Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Indiana 46208. Frank B. Ramsey, M.D., 1802 N. Illinois St., Indianapolis, Indiana, Editor.
7. Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given); Indiana State Medical Association, Indianapolis, Indiana 46208.
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None.
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10. The average No. of copies each issue during preceding 12 months are: (A) Total No. copies printed 4,800 (net press run). (B) Paid circulation: 1. Sales through dealers and carriers, street vendors and counter sales, 4,400. 2. Mail subscriptions, 50. (C) Total paid circulation, 4,450. (D) Free distribution (including samples) by mail, carrier or other means, 150. (E) Total distribution (sum of C and D), 4,600. (F) Office use, left-over, unaccounted, spoiled after printing, 200. (G) Total (sum of E & F—should equal net press run shown in A), 4,800. No. of copies single issue nearest to filing date are (A) Total No. copies printed (net press run), 4,900. (B) Paid circulation: 1. Sales through dealers and carriers, street vendors and counter sales, 4,400. 2. Mail subscription 50. (C) Total paid circulation, 4,450 (D) Free distribution (including samples) by mail, carrier or other means, 200. (E) Total distribution (sum of C and D), 4,650. (F) Office use left-over, unaccounted, spoiled after printing, 250. (G) Total (sum of E & F—should equal net press run shown in A), 4,900

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The Journal
of the INDIANA STATE MEDICAL ASSOCIATION
Supervised by The COUNCIL
Volume 60 — February 1967 — Number 2

About Our Cover

THE KRANNERTS AND INDIANA MEDICINE

Searching investigation is the key to the eventual conquest of man's ailments and the communication of advancing knowledge is the key to their prevention.

It is especially noteworthy that two of the Midwest's most noted philanthropists — Herman C. Krannert and his wife, Ellnora, of Indianapolis — have chosen to focus their generosity on the two major components of this formula — health and education.

The Krannert Institute of Cardiology, (part of the Marion County General Hospital), is the most striking visible symbol of this concept. Dedicated in 1962 and with the second phase of the building program just completed, the Institute is located west of the Marion County General Hospital. Nearby is the new Indiana University Hospital with another Krannert gift, the Krannert Pavilion. Indeed, the Institute rests in the center of one of the most scientifically planned hospital and medical teaching complexes in the country.

In order to maintain the highest degree of professional competence, the staff of the Krannert Institute of Cardiology is closely tied academically to the Department of Medicine of the Indiana University School of Medicine. The papers presented in this issue of *The Journal* reflect some phases of the basic interests of the Institute, which include electrophysiology and myocardial metabolism on one hand and hemodynamics of valvular disease and problems of coronary artery disease at the clinical level.

Over the past few years, the institutions developed and financed by the outstanding team of Mr. and Mrs. Krannert have come to be known as the "Krannert Centers of Excellence." Most of them are attached to educational institutions or hospitals and most of them are located in the Midwest which the Krannerts regard as the source of their life stimulation and rewards.

Herman C. Krannert is the founder and chairman of Inland Container Corporation which pioneered the corrugated box as the principal container for goods in transit and has now grown to a national company with 26 plants, four huge paper mills, more than a million acres of timberland, more than 4,000 employees and about $150 million in annual sales.

Mr. Krannert was born in Chicago and was graduated from Crane Technical

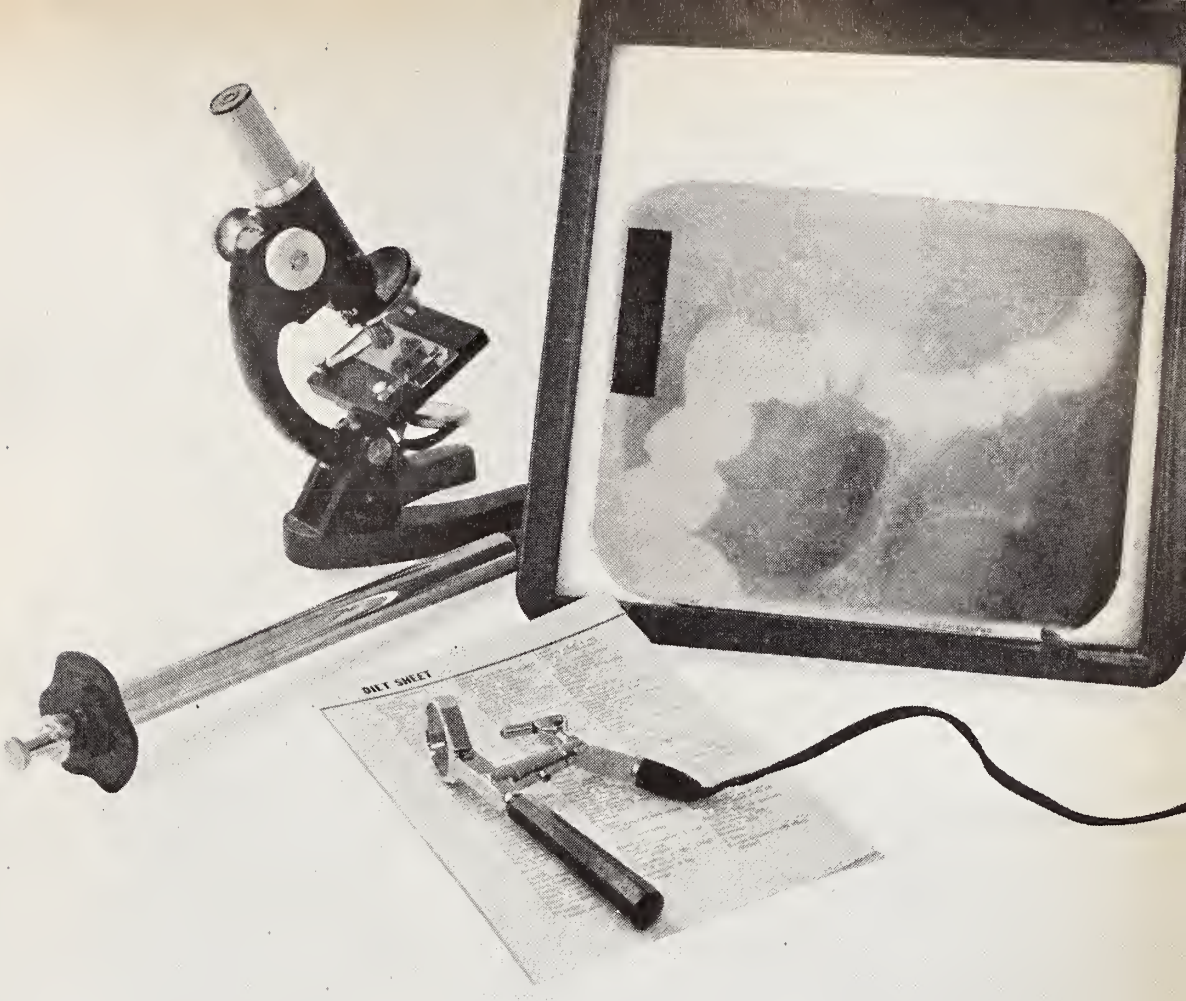
High School there in 1906. He worked for two years — at $6 a week — to support his widowed mother and to save money for college. He chose the University of Illinois and was graduated in 1912.

Mr. and Mrs. Krannert are particularly attracted to the types of projects which can be truly said to further the life and well-being of other human beings. Their underwriting of the Krannert Institute of Cardiology derives from their recognition that diseases of the heart and circulation are by far the greatest causes of death and disability in our nation. This recognition evidenced itself as far back as 1947 when the Krannerts established the first cardiology fellowship at what was at that time known as the Indianapolis City Hospital. In 1952 they formally established the Robert W. Moore Heart Clinic which served as the predecessor to the Institute.

Typical of the Krannert philosophy, the Robert M. Moore Clinic has been preserved to perform a special work in caring for the underprivileged. Work at the Institute has a worldwide impact through communication of its knowledge and through the specialized training of young physicians.

The Krannert Pavilion at the Indiana University Medical Center makes available to private patients, upon referral by their own physician, the most advanced medical facilities and techniques. Other health-related Krannert projects in Indiana include the Krannert Tower at Methodist Hospital in Indianapolis.

The Indiana State Medical Association honored Mr. and Mrs. Krannert at the 1965 annual convention with a plaque signifying their many contributions to medical education in Indiana.



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Digitalis cardiotoxicity deserves prompt diagnosis and careful treatment. Recognition of potential prefibrillatory arrhythmias is of special importance.

Treatment of Arrhythmias due to Digitalis

CHARLES FISCH, M.D.
*Indianapolis**

It is safe to begin the discussion of treatment of digitalis induced disorders of automaticity and conduction of the heart ("cardiotoxicity") by stating that there is no specific antidote for digitalis poisoning and the various antiarrhythmia agents used may suppress not only digitalis induced disorders of rhythm but also arrhythmias not related to digitalis.

An attempt will be made to review briefly some of the problems faced by the clinician in the treatment of digitalis induced arrhythmias. The discussion will include (1) the difficulties in diagnosing such arrhythmias, (2) indications for their treatment and (3) a brief comment about some of the more popular drugs used in the management of cardiotoxicity.

Needless to say, prevention of toxicity is the best form of treatment. Such a statement, however, is of little comfort to the physician who is faced with an arrhythmia recorded in a patient with heart disease of varying severity, treated not only with digitalis, but often with many other drugs—each of which is capable of producing arrhythmias independent of the underlying heart disease.

Recognition of Digitalis Toxicity

The first question to be answered when cardiotoxicity is suspected is whether or not the arrhythmia in question is actually due to digitalis. Analysis of the ECG as an isolated finding will rarely give a definitive answer. All types of arrhythmias induced by digitalis may be caused by heart disease, the drugs used in the treatment of the underlying disease or a combination of the two. Although some arrhythmias per se have a high degree of specificity as an index of digitalis toxicity a definitive statement that a given arrhythmia is due to digitalis cannot be based solely on the ECG manifestations. It must be supported with facts based on a thorough familiarity with the pharmacology and toxicology of the drug (e.g., absorption, excretion, extracardiac manifestations of toxicity, etc.) with the severity of the underlying heart disease, with factors which contribute to and/or precipitate toxicity (e.g., hypokalemia, renal impairment, CVA, intercurrent infection, etc.).

Since the subject of this article is digitalis "cardiotoxicity," it seems proper to begin by commenting on the specificity of a given arrhythmia as a sign of digitalis toxicity. The classical approach to this problem is twofold and includes (1) a simple analysis of the frequency of distribution of different arrhythmias in patients considered to be digitalis intoxicated and (2) a determination of the probability that any given arrhythmia is due to digitalis.

With the above in mind, the finding of 10 studies[1-10] said to represent digitalis induced arrhythmias were compiled and are reproduced in Table I.

Analysis of this table discloses that 71% of the patients manifested ven tricular arrhythmias of which ventric ular tachycardia (V.T.) and multifoca ventricular premature systole (V.P.S. were most common. A-V conductio disturbances were seen in 29% an various forms of atrial arrhythmia in 26%. The high incidence of atria fibrillation recorded can be explaine by the fact that it was impossible, i most series, to determine whether th arrhythmia appeared as a result o digitalis intoxication or was presen before digitalis was administered. Th true incidence of digitalis induce atrial fibrillation is much lower. I should be pointed out that the arrhy thmias which strongly suggest digitali intoxication, namely paroxysmal atria tachycardia (PAT) with block, A-V dissociation and A-V nodal tachy cardia, comprise a rather small per centage of the entire group.

Although this type of approach t the problem of digitalis cardiotoxicit gives some help in recognition of digi talis as the etiological factor, the lac of a control group and the retrospec tive nature of the study limits its use fulness. For example, there is a gros discrepancy from series to series i the simple recognition of the existenc of certain arrhythmias. While all 1 investigators observed second degre A-V block, only four described A-V nodal tachycardia and multifoca V.P.S.

Of more help has been a determi nation of the probability that a specifi arrhythmia is due to digitalis. Suc studies have the advantage of being no only prospective in nature but also in cluding a control group. This info

* From the Department of Medicine, Indiana University School of Medicine and the Krannert Institute of Cardiology, Marion County General Hospital, Indianapolis.

Supported in part by the Herman C. Krannert Fund, U.S.P.H.S. Grants HE-6308, HTS-5363 and HE-5749 and the Indiana Heart Association.

mation was compiled and is presented in Table II.

This table demonstrates the high degree of probability that multifocal V.P.S., A-V nodal tachycardia, A-V dissociation other than the conventional A-V block, PAT with block and V.T. are due to digitalis. The percentages are 93, 72, 63, 55 and 21 respectively. In the case of V.T., the true incidence was probably higher than 21%, most likely closer to 45%.

Again, such data, although carefully collected, has its limitations; the most serious being that the number of patients in various series is rather small. For example, the given probability that multifocal V.P.S. and A-V dissociation are due to digitalis is based on one study each. However when these arrhythmias are accompanied by other clinical evidence of digitalis toxicity one can assume, for all practical purposes, that these arrhythmias are indeed digitalis induced. Additional evidence that these arrhythmias have a high degree of specificity in the diagnosis of digitalis cardiotoxicity will be discussed in connection with their treatment.

The above discussion may be summarized by saying that, although digitalis has at one time or another produced every known arrhythmia, it is obvious that only a relatively small number of these are highly specific in the diagnosis of digitalis cardiotoxicity.

DIGITALIS AS A CAUSATIVE FACTOR			
RRHYTHMIA	TOTAL	DUE TO DIGITALIS	PROBABLY DUE TO DIGITALIS
ultifocal VPS	15	14 (93%)	
/ Nodal Tachycardia	62	45 (72%)	2 (3%)
/ Dissociation	30	19 (63%)	
AT with Block	72	40 (55%)	9 (12%)
entricular Tachycardia	37	8 (21%)	9 (24%)

TABLE II
PROBABILITY that multifocal V.P.S., A-V nodal tachycardia, A-V dissociation, PAT with block and V.T. are due to digitalis.

ANALYSIS OF CARDIAC ARRHYTHMIAS (10 series with a total of 691 patients)			
	No. of Series	No. of Arrhythmias	
Ventricular Arrhythmias		470 (71%)	
Ventricular Prematures		420	
Bigeminy	9		150
Multifocal	4		121
Not Specified	4		79
Other (Frequent, unifocal, occasional, etc.)	3		70
Ventricular Tachycardia	7	50	
A-V Block		194 (29%)	
First Degree	7	87	
Second Degree	10	58	
Wenckebach	3		4
Third Degree	6	37	
Unspecified	2	12	
Atrial Arrhythmias		177 (26%)	
Atrial Fibrillation	9	80	
With Slow Rate	2		21
PAT With Block	7	59	
Atrial Prematures	4	27	
Atrial Flutter	4	11	
SA Arrhythmias		85 (13%)	
Sinus Tachycardia	3	29	
Sinus Bradycardia	4	27	
With Nodal Escape	1		11
Sinus Arrest	2	11	
S-A Block	3	7	
Wandering Pacemaker	3	11	
A-V Dissociation	4	65 (9.8%)	
A-V Nodal Arrhythmias		47 (7%)	
Nodal Tachycardia	4	32	
Nodal Rhythm	2	11	
Nodal Prematures	1	4	

TABLE I
FREQUENCY of various digitalis induced arrhythmias.

Indications for Treatment

Once a digitalis induced arrhythmia is recognized, it seems more important and infinitely more difficult to decide whether to simply discontinue the glycoside or to proceed with more definitive therapeutic measures. The position that all digitalis induced arrhythmias should be abolished with antiarrhythmia agents would find few supporters. What makes the question particularly important is that all antiarrhythmia agents may manifest serious side effects and, in the hands of those who use such measures on rare occasions, may in fact be hazardous.

Needless to say all digitalis induced arrhythmias are potentially dangerous. Fortunately, however, the vast majority can be controlled by simply discontinuing the drug. Failure to stop the glycoside whenever digitalis cardiotoxicity is suspected may be catastrophic. This latter point is illustrated in Table III which is modified from the work of Dreifus and associates.[17]

This table demonstrates an extremely high mortality when digitalis is continued in the face of arrhythmias considered highly specific as an index of digitalis toxicity, namely PAT with block, A-V nodal tachycardia, A-V dissociation and V.T. The number of deaths was 14 out of 14 for PAT, five out of six for A-V nodal tachycardia, three out of four for A-V dissociation and 12 out of 13 for ventricular tachycardia.

The decision to treat an arrhythmia actively is not difficult if the heart rate is either so rapid or so slow as to

MORTALITY DUE TO DIGITALIS					
ARRHYTHMIA	TOTAL	DIGITALIS CONT.		DIGITALIS DISCONT.	
		No.	Deaths	No.	Deaths
PAT with Block	53	14	14	38	3
AV Nodal Tachycardia	42	6	5	36	7
Passive AV Nodal Rhythm	39	4	3	35	1
Ventricular Tachycardia	30	13	12	17	8

TABLE III

COMPARATIVE mortality rates between patients in whom digitalis was continued and in patients in whom the drug was discontinued. (Modified from Dreifus and co-workers[17]).

compromise the cardiac output with resultant impairment of regional blood flow (e.g., angina, renal failure, Adams-Stokes), a significant drop in blood pressure or congestive heart failure.

A more difficult problem is presented by the much more numerous arrhythmias that do not compromise the circulation. In such instances a recognition of the "serious", "premonitory" or "prefibrillatory" arrhythmias is important for these should be treated aggressively irrespective of their effect on the hemodynamic function of the cardiovascular system.

In hopes of being able to recognize such "premonitory" arrhythmias, deaths ascribed to digitalis were reviewed. These were found to occur only in patients with heart disease. Of the 15 deaths accurately documented as due to digitalis, the premonitory (most likely prefibrillatory) arrhythmias were found to be the following: 10 cases of V.T., two cases of multifocal V.P.S., two cases of PAT with block and in one, carefully monitored, ventricular fibrillation was the first arrhythmia detected.[18,19] On the other hand, in the eight patients with normal hearts who ingested large amounts of digitalis, only one showed occasional V.P.S.[20] Of the remainder, there were four cases of A-V block and one each of PAT with block, atrial fibrillation with nodal rhythm and atrial flutter with nodal rhythm. None of these eight patients died.

The above findings support the position that V.T., multifocal V.P.S. and occasionally PAT with block, when due to digitalis, should be treated aggressively as potentially "prefibrilla-

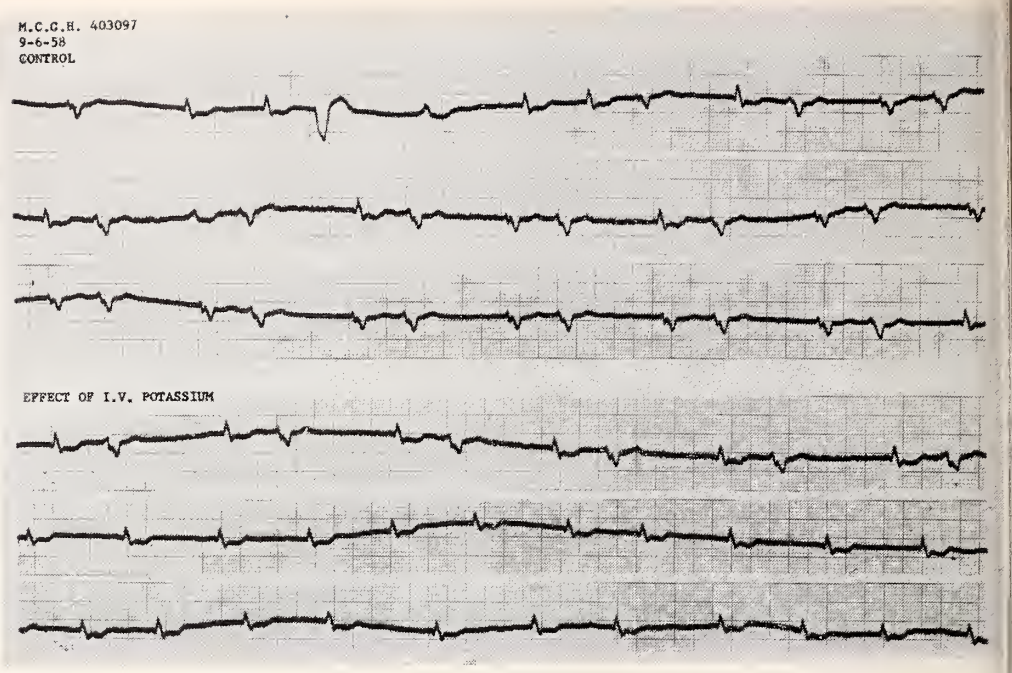


FIGURE 1

THIS figure is shown not only because it demonstrates the efficacy of IV potassium, but also because of the interesting form of arrhythmia. The top row is the control and demonstrates atrial fibrillation with occasional V.P.S. The third row represents V.T. with a 3:2 exit block. Depression of the ventricular ectopic rhythm is seen in rows 5 and 6. The depression of ventricular tachycardia was preceded by reappearance of ventricular bigeminy (row 4).

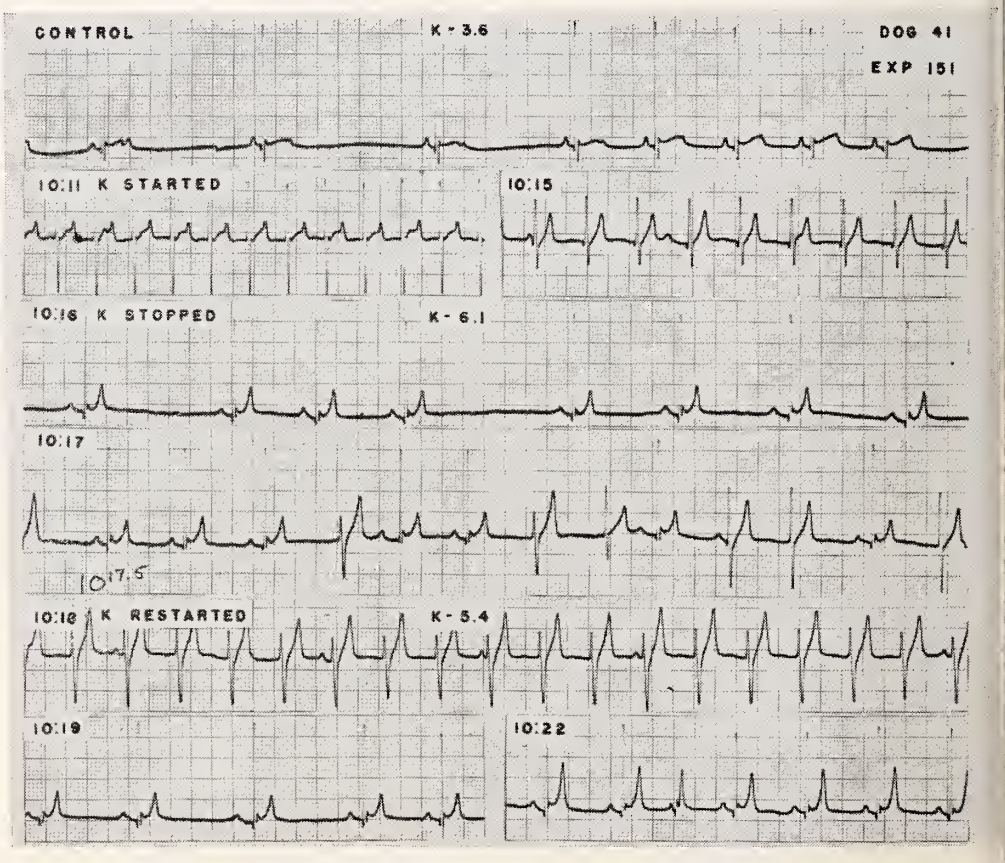


FIGURE 2

DEMONSTRATED here is the transient nature of action of K on a digitalis induced arrhythmia. Ventricular or, in this case A-V nodal tachycardia, was induced with acetyl strophanthidin. Elevation of plasma K from a control of 3.6 to 6.1 mEq/L abolished the arrhythmia. One minute (10:17) after the K was discontinued, the arrhythmia recurred. At that time the plasma K dropped to 5.4 mEq/L. One minute after K was restarted (10:19) the ectopic rhythm was again depressed.

tory" arrhythmias.

Drug Therapy of Ectopic Rhythms

Patients with seriously compromised C-V function and in need of prompt termination of the arrhythmia should be treated with intravenous administration of antiarrhythmia agents. The drug of choice in such a situation is K.[21] The cation can be given in a solution containing 50 to 100 mEq/L at a rate of .5 to .75 mEq/min. The major drawback to intravenous use of K is a need for careful monitoring and the transient nature of its antiarrhythmic effect (Figures 1, 2).[22-24] The drug can also be given orally in doses of 40 to 50 mEq, repeated once or twice at 1 to 1½ hourly intervals.

It must be noted that in addition to its antiarrhythmic property, K depresses conduction and contractility. As a rule, however, these therapeutically undesirable characteristics are preceded by depression of ectopic rhythms (Figure 3). The existence of such a margin of safety is supported by data gathered in our laboratory and based on 27 infusions of K in dogs with acetyl strophanthidin induced V.T. It was found that the amount of K necessary to suppress the arrhythmia averaged 3.9 mEq and that necessary to produce A-V block was 18.3 mEq. The plasma K level at which ectopic rhythm was suppressed was 6.3 mEq/L and the level at which A-V block appeared was 8.4 mEq/L. Based on such data and clinical experience, it is our feeling that there should be little or no hesitancy in the use of K if a prolonged P-R interval is the only abnormality, provided the administration of the cation is carefully monitored (Figure 4).

In addition to K, procaine amide[25-27] given intravenously or orally and less frequently quinidine are used to control digitalis induced cardiotoxicity.[28-30] These drugs are usually employed either when K fails or when its use is for one reason or another contraindicated (e.g., renal insufficiency).

Some of the less commonly employed and newer agents include

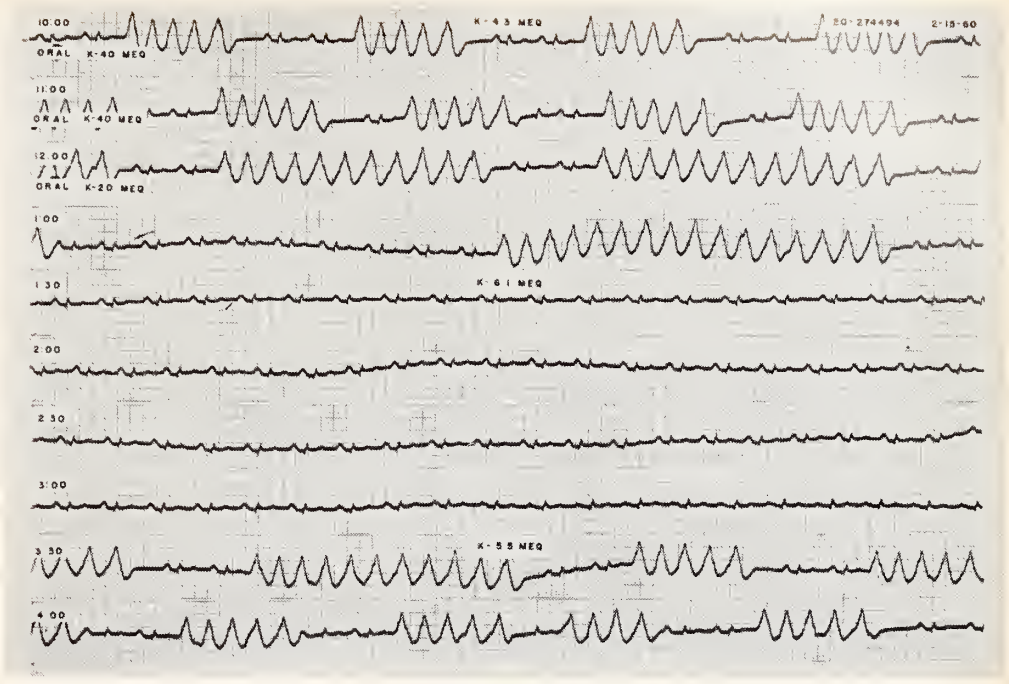


FIGURE 3

REPETITIVE V.T. is abolished when the plasma K level rose to 6.1 after oral administration of 100 mEq of potassium. The arrhythmia recurred three and one-half hours after the last dose of potassium was given.

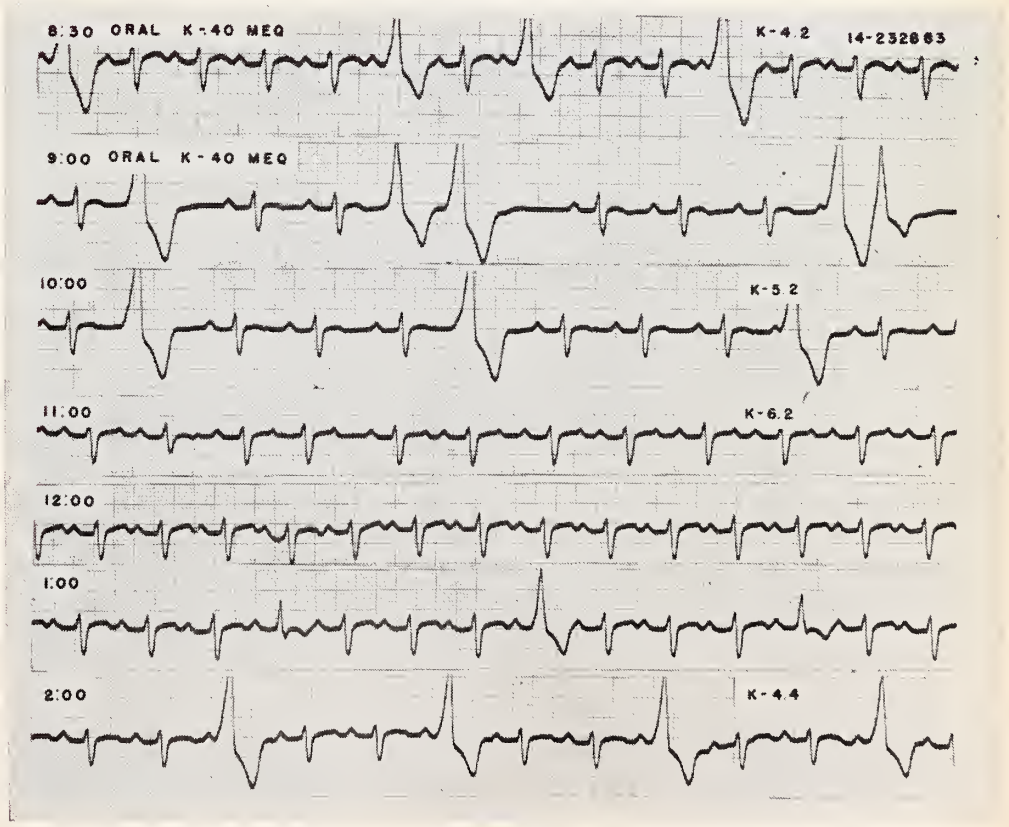


FIGURE 4

THIS figure demonstrates depression of ventricular ectopic beats after 80 mEq of K was given orally but without affecting the A-V conduction, even though the P-R interval in this particular case was prolonged as demonstrated in the control tracing. The arrhythmia was suppressed at a plasma K level of 6.2, in keeping with findings in the experimental animal. The arrhythmia recurred four hours after the potassium was given.

diphenylhydantoin,[31] and antazoline.[32] These do not appear to offer any advantage over the previously mentioned drugs.[33] Beta-adrenergic blocking agents have been of particular interest to a number of investigators and may prove to be an important adjunct in the management of digitalis toxicity.[34-37]

Preliminary reports indicate that for prompt control of digitalis induced arrhythmias, Lidocaine may ultimately prove efficacious.[38-40] In 15 experiments conducted in 15 dogs in our laboratory, ouabain was administered until ventricular tachycardia developed. In each instance injection of 50 to 80 mg. of Lidocaine resulted in restoration of normal sinus rhythm.[40] The effect of this drug is shortlived and as in the case of K, it depresses conduction. Further clinical trials are needed before its utility as an antiarrhythmia agent is firmly established. The drug can be administered as a 1:1000 solution at a rate of 7-10 mg per minute up to an initial dose of 1 mg per Kg of body weight (Figures 5, 6) or as a single dose of 1 mg/Kg.

Cardioversion and Digitalis Cardiotoxicity

Cardioversion is used widely for prompt termination of various cardiac arrhythmias. In the case of digitalis induced arrhythmias, a large body of evidence is accumulating that its use has serious limitations. This procedure may fail to terminate the arrhythmia, may unmask digitalis cardiotoxicity or may in some instances be followed by a more serious disturbance of rhythm.[41-46] Cardioversion should be used with great caution in the presence of digitalis toxicity and only if the more conventional measures fail[28] (Figures 7, 8).

Heart Block due to Digitalis

Advanced heart block due to digitalis will frequently improve after the drug is discontinued. Definitive therapy, when indicated, is directed toward improving A-V conduction by inhibition of the vagus (e.g., atropine) or the use of adrenergic compounds (e.g., isoproterenol).[28] The occasional

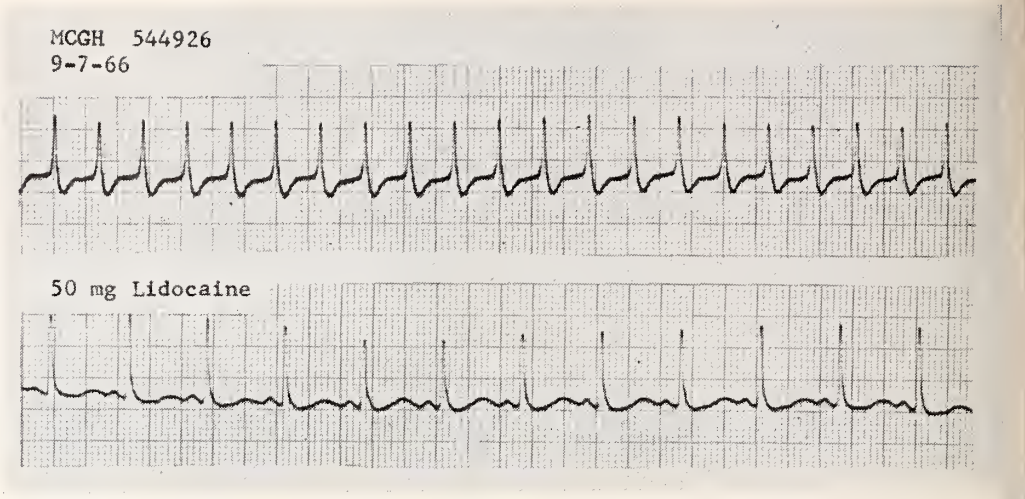


FIGURE 5

THE effect of 50 mg of Lidocaine on A-V nodal tachycardia in a patient receiving digitalis is demonstrated here.

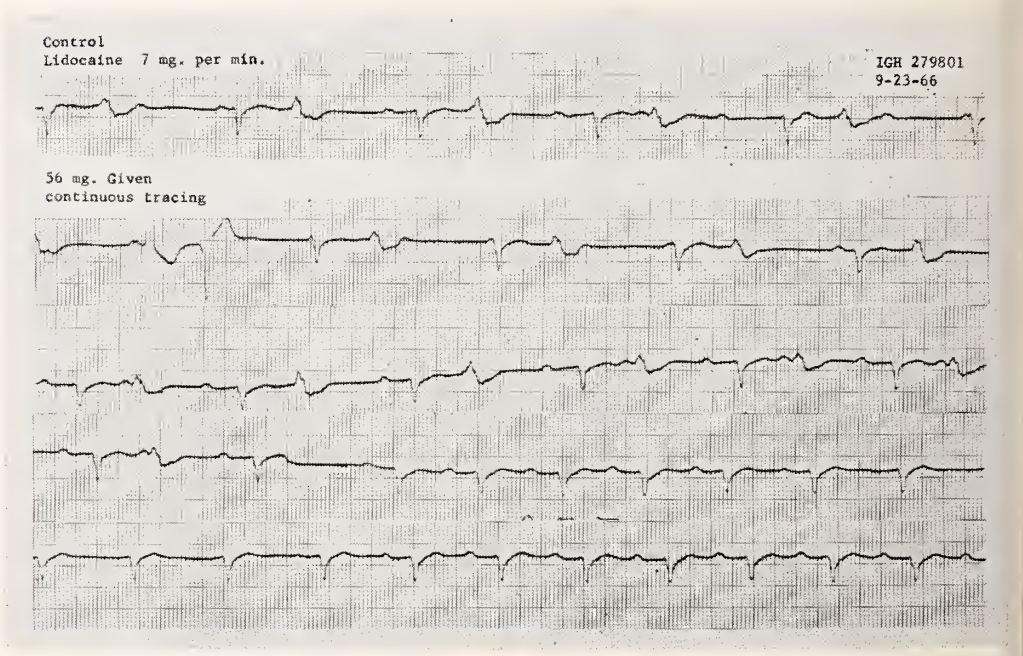


FIGURE 6

THIS figure not only represents the effect of Lidocaine on a digitalis induced arrhythmia but also suggests a possible mechanism of action of the drug. The upper strip, the control, demonstrates an A-V dissociation with an idioventricular R-R of 1.8 sec. and a ventricular bigeminy. The A-V dissociations, as will be seen later, are either due to primary depression of orthograde A-V conduction or retrograde concealed invasion of the junctional tissue by V.P.S.

The next four strips are continuous and were taken after 56 mg of Lidocaine were given IV in a solution of 1:1000 at a rate of 7 mg per min. The top strip of this run represents an A-V dissociation with an R-R of the idioventricular beats of about 1.72 sec. and ventricular bigeminy. The third and the beginning of the fourth strip show first degree A-V block with a P-R of .32 and ventricular bigeminy. The resumption of the sinus rhythm may have been due to either the Lidocaine preventing V.P.S. from entering the junctional tissue or an actual enhancement of orthograde A-V conduction by the drug.

Final suppression of ventricular ectopic focus is seen in fourth and fifth rows. Note the depression of intraatrial conduction — not an uncommon observation when Lidocaine is given.

improvement of A-V conduction due to K is most likely due to its antivagal property.[47-50] The unquestionable depression of both A-V and intraventricular conduction by K in the presence of digitalis toxicity, demonstrated both in animals and humans, precludes its use in cases of digitalis induced high degree of A-V block.[51-54]

If the slow rate is thought to contribute to heart failure, or results in Adams-Stokes disease, temporary transvenous intracardiac pacing is the treatment of choice.[55,56]

Summary

The incidence and specificity of digitalis induced arrhythmias are reviewed and an attempt made to recognize the potentially prefibrillatory arrhythmias. Indications for, and the treatment of digitalis induced arrhythmias are discussed.

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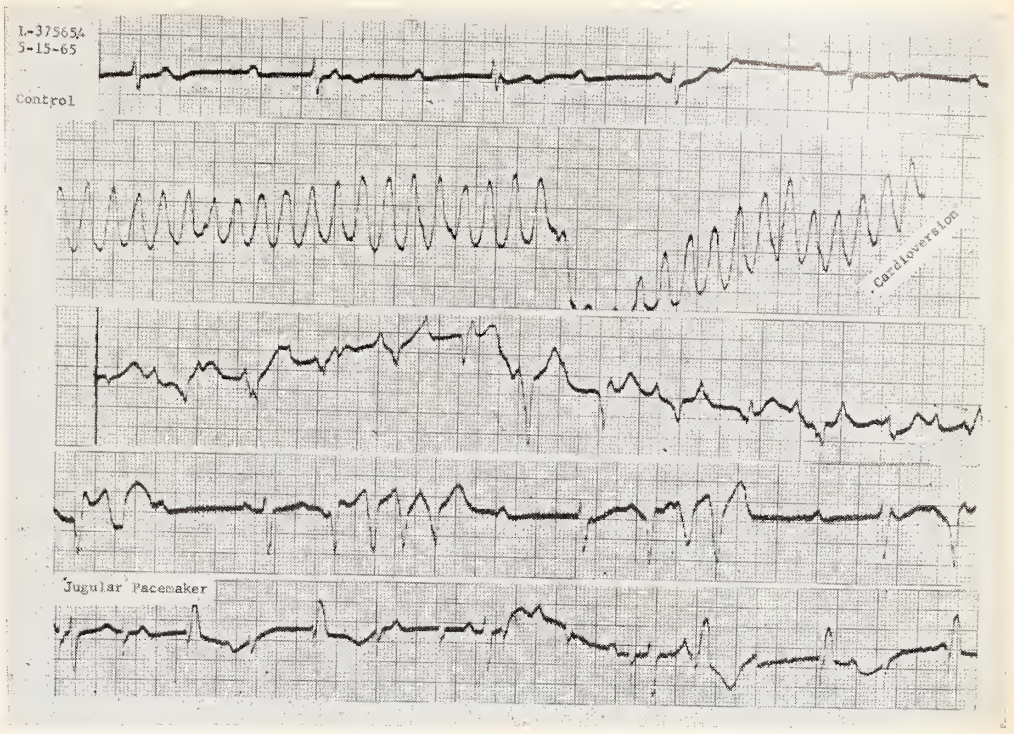


FIGURE 7

THE unmasking of PAT with block in a patient considered to be digitalis intoxicated. This patient, as is shown in the upper strip, was admitted to the hospital after having been given unknown amounts of digitalis. Rapid ventricular tachycardia (row 2) was terminated electrically and was followed by PAT and a slower V.T. Of the two, the PAT was considered a sign of digitalis toxicity unmasked by cardioversion. Repetitive V.T. is seen in row 4. Successful control of the arrhythmia was achieved with an intracardiac jugular pacemaker as recorded in bottom row.

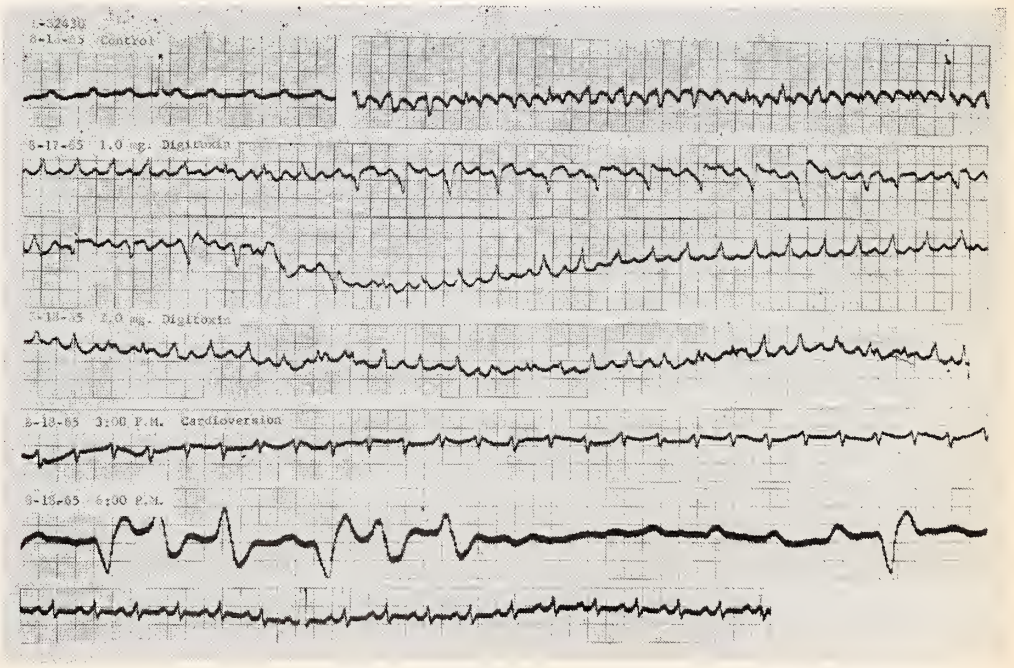


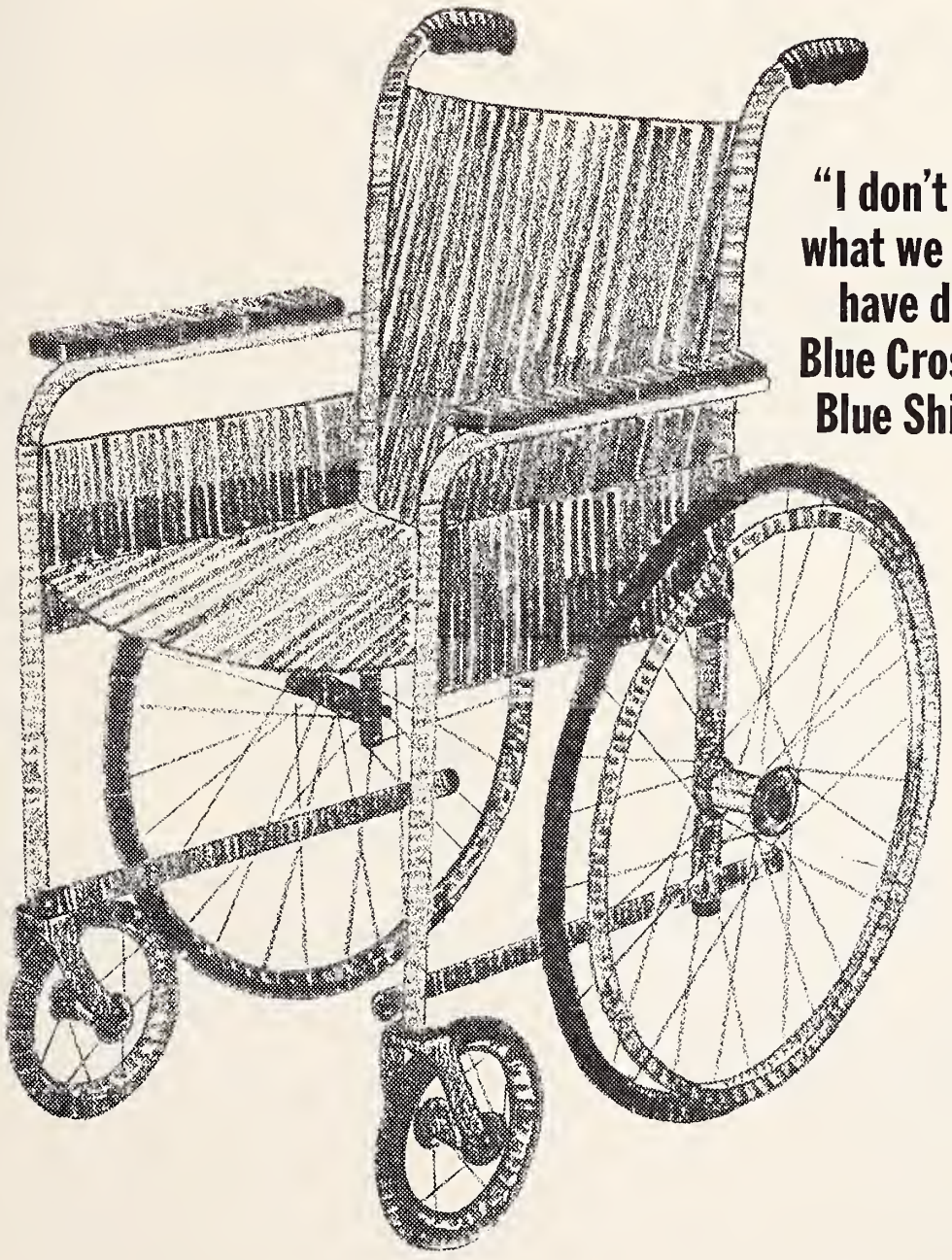
FIGURE 8

THESE records were obtained from a patient with chronic obstructive emphysema. The upper strip demonstrates an atrial flutter with a 2:1 block. The patient was given 1.0 mg of digitoxin on 8-17 and because there was a slowing of the rate with carotid pressure, he had received another 1.0 mg of digitoxin over the next 24 hours. It was not recognized at that time that the slower rate resulted from carotid pressure (second row) and actually represented an ectopic arrhythmia, probably V.T., unmasked by increasing the degree of A-V block. On 8-18, after the second 1.0 mg dose of digitoxin was given, the arrhythmia is one of atrial flutter with A-V nodal tachycardia. Attempted cardioversion produced an atrial standstill and A-V nodal tachycardia. Repeat cardioversion later the same day resulted in ventricular fibrillation from which the patient was successfully resuscitated (bottom strip.)

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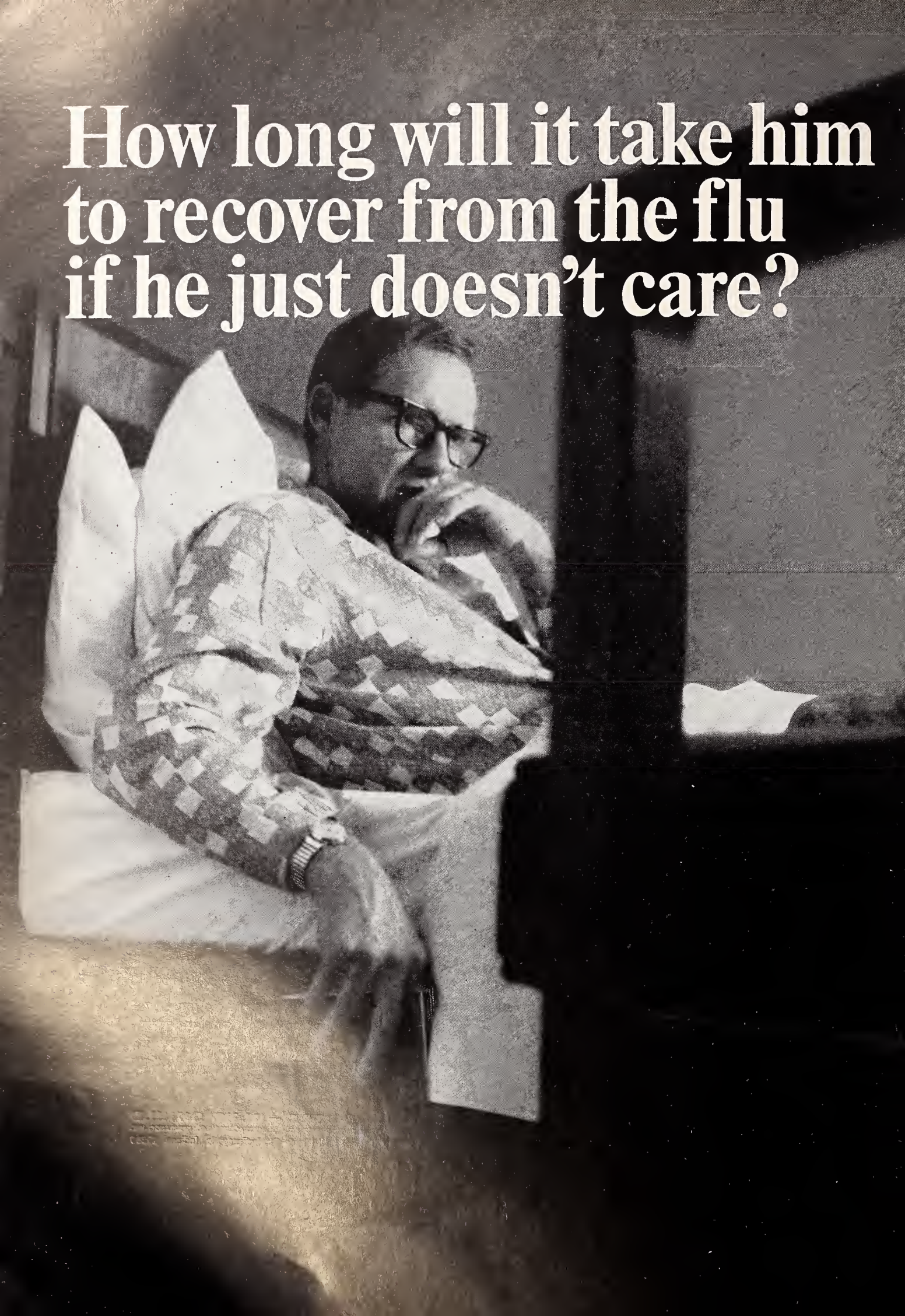
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A trial administration of K is recommended in normokalemic or hypokalemic patients with malfunctioning implanted cardiac pacemakers.

The Effect of Potassium on the Ventricular Excitability Threshold in Patients with Implanted Cardiac Pacemakers

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BOTH hyperkalemia and hypokalemia have been reported to increase the threshold of myocardial excitability and thus have been incriminated in failure of implanted cardiac pacemakers.[1,2] In view of this divergence of opinion as to the effect of potassium (K) on excitability, the relative paucity of observations of the effect of K on malfunctioning pacemakers[3] and the frequency of pacemaker failure, we felt it worthwhile to report our experience with three patients in which failure of implanted cardiac pacemakers to stimulate was temporarily corrected with K. In addition, in one of these patients, with the rate and strength of the pacemaker stimulus unchanged, the excitability threshold was manipulated by changing the K equilibrium.

Case Report #1

A 48-year-old asymptomatic woman was readmitted on November 24, 1964 for the fourth time because of a malfunctioning pacemaker. The patient had had her first pacemaker implanted in 1962 because of complete atrioventricular (AV) block and recurrent Adams-Stokes attacks. She subsequently required three pacemaker replacements.

The ECG on admission showed 2:1 AV block with the pacemaker stimulus eliciting a response only when falling in the supernormal period as shown in Figure I, line 1. The plasma K at that time was 4.6 mEq/L. Thirty-five minutes following the administration of 30 mEq of K by mouth, the plasma K rose to 5.0 mEq/L with resulting 1:1 pacemaker response (line 2). A significant number of pacemaker stimuli had become effective much earlier than the 35 minutes required for a total 1:1 response. At 10:55 a.m., an intravenous drip containing 15 units of crystalline insulin in 1000 cc of 10% glucose in water was begun at the rate of 6 cc per minute. By 11:50 a.m., the pacemaker response was again seen only during the supernormal phase (line 4). The plasma K level was 4.5 mEq/L. 30 mEq of oral K was again given and within 30 minutes (12:20 p.m.) 1:1 pacemaker response was observed, although, again, this was the maximum time required. The plasma K level at this time was 5.1 mEq/L. The normal response to the pacemaker persisted until 3:00 p.m. when glucose and insulin were again administered. Fifteen minutes later, pacemaker response was observed only occasionally and, at this time, the plasma K level was 4.4 mEq/L.

Case Report #2

A 72-year-old woman was admitted to the hospital because of many episodes of syncope on the day of admission and an ECG which showed malfunction of a previously implanted pacemaker.

The patient was first found to have complete AV block with Adams-Stokes syncope in 1962. A pacemaker was implanted at that time. In January of 1964, pacemaker replacement was required because of a broken wire. No further difficulties were encountered until this admission.

The ECG on admission showed complete AV block with periodic pacemaker failure resulting in ventricular standstill followed by a slow idioventricular rhythm. While awaiting a jugular pacemaker insertion, a number of episodes of ventricular standstill and Adams-Stokes seizures were terminated by intravenous administration of 5.0 to 7.0 mEq K given over the period of about one minute. The venous plasma K was determined prior to and following one such infusion and was found to go up from 3.9 to 4.3 mEq/L (Figure II). It was soon discovered that the patient could be maintained symptom free with a constant intravenous microdrip of a solution containing 80 mEq KCl per 1000 cc in saline and she was so maintained until the powerpack was replaced 48 hours later.

Case Report #3

A 54-year-old man was admitted to the hospital on December 23, 1965 because of chest pain and hemoptysis. There was a four year history of bilateral deep venous thrombosis. The patient's symptomatology, physical examination and laboratory findings

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Supported in part by the Herman C. Krannert Fund, the U.S.P.H.S. Grants HE-6308, HTS 5363 and HE-5749 and the Indiana Heart Association.

Dr. McHenry is a trainee of the National Heart Institute, U.S.P.H.S.

were compatible with the diagnosis of a pulmonary embolus. There was no past history suggestive of heart disease although the patient was a poor historian.

The ECG on admission showed complete AV block with idioventricular rhythm.

On December 28, the patient suffered Adams-Stokes seizures which failed to respond to medical management and a transvenous pacemaker was inserted. Six days later, a pacemaker was implanted in an axillary pocket deep to the serratus anterior muscle. The wire leads were implanted in the left ventricular apex approximately 12 mm apart. Postoperatively, the patient did well until January 12, when the pacemaker failed to stimulate except intermittently and the patient suffered an Adams-Stokes seizure. An infusion of 5 mEq of KCl in 30 cc of saline over a one minute period resulted in a 1:1 pacemaker response. The serum K was raised from 4.0 to 4.3 mEq/L. The effect was transient, however, and a constant microdrip of a solution containing 100 mEq of KCl in 1000 cc of saline administered every 24 hours was required to maintain pacing until a new powerpack was installed five days later. No further difficulties were encountered and the patient was discharged on January 24, 1966.

Discussion

Since the advent of cardiac pacemakers for the management of complete heart block, an understanding of the relationship of K and the myocardial excitability threshold has become clinically important. This relationship is complex and has been the subject of a recent review.[4] A single fiber will be excited if sufficient current is applied to decrease the resting membrane potential to the threshold potential. At the same time, however, the alterations in the membrane potential associated with excitation also affect the amplitude and speed of rise of phase 0 of the action potential. These changes may result in altered conductivity characteristics. When an implanted electrode is used to stimulate the entire

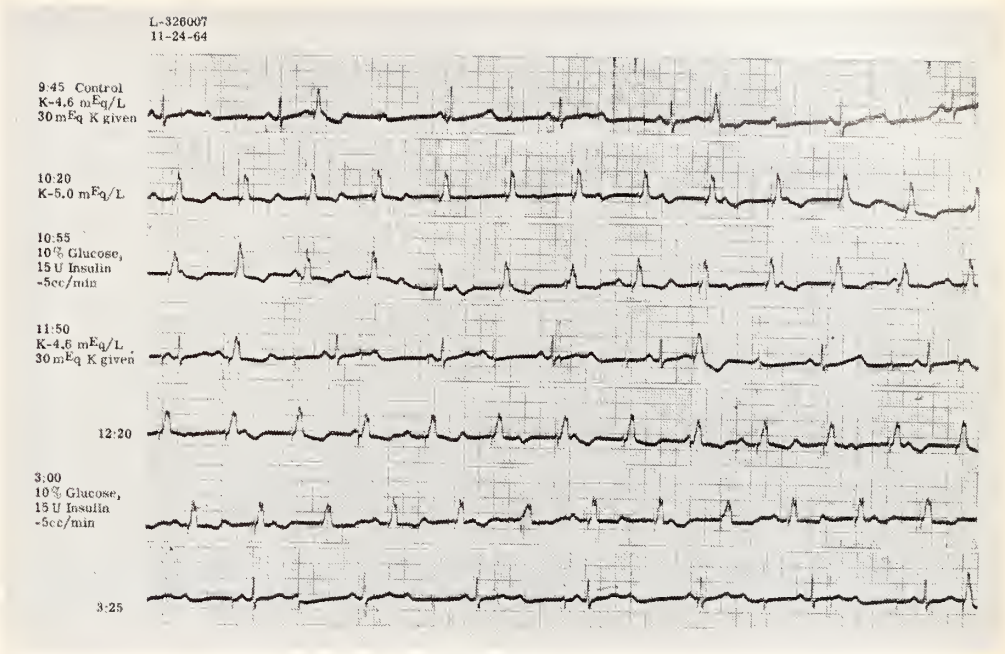


FIGURE I

THIS figure demonstrates the effect of K level on the response of the heart to stimulation. Line 1 is a control tracing showing 2:1 AV block with pacemaker stimuli resulting in a response only when falling in the supernormal period. A stable pacemaker response is achieved on two occasions with K (line 2 and line 5), at which time the plasma K levels were 5.0 and 5.1 mEq/L respectively. Administration of glucose and insulin resulted in loss of pacemaker response on two occasions (line 4 and line 7) and lowering of plasma K to 4.5 and 4.4 mEq/L respectively.

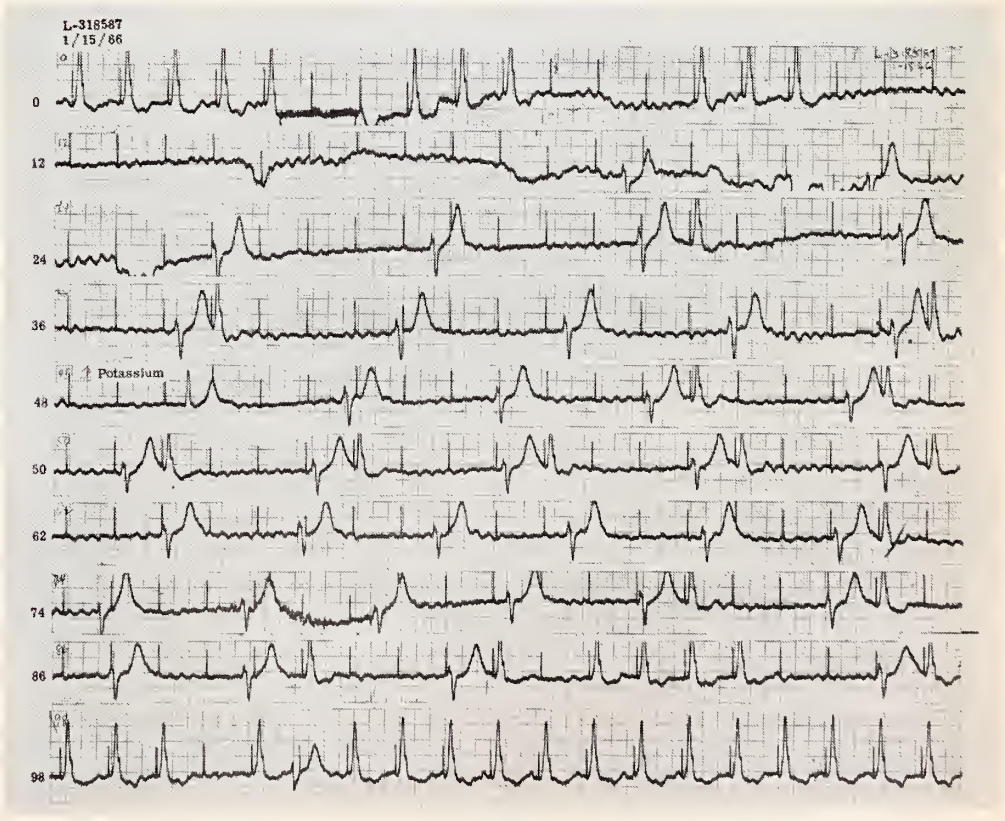


FIGURE II

THIS is a continuous tracing demonstrating the response of the heart to an artificial pacemaker following administration of K. The time periods in seconds are shown on the left. The control plasma K was 3.9 mEq/L and at the end of administration of 7 mEq of K intravenously, a 1:1 pacemaker response was achieved (bottom strip) with a plasma K level of 4.3 mEq/L.

heart, the excitability threshold is recorded on the surface ECG as a propagated impulse. Therefore, the threshold for excitation of the heart must equal a stimulus of such strength that it will not only depolarize the fibers under the stimulating electrode; but will also result in propagation of the impulse through the myocardium. Thus, the threshold of response for the entire heart as recorded on the ECG cannot distinguish between changes in excitability, as defined by a reduction of the resting potential to threshold potential, and conduction changes.

Increased extracellular K decreases the resting membrane potential of the myocardial cells allowing a stimulus of lesser intensity to reduce it to threshold potential. At the same time, conduction of an impulse through the myocardium may also be enhanced. It has been stated that the lowest excitability threshold coupled with a most rapid conduction velocity usually occurs at K concentrations which are slightly higher than the upper limits of normal.[4]

On the other hand, at K concentrations exceeding 7 mEq/L, an increase in ventricular threshold and decreased conductivity have been well documented.[1]

At moderately elevated K concentrations, the net effect on excitability and conduction is difficult to predict. It depends on whether excitability or conductivity have been predominantly altered or both. Thus, because of the dual effect of K on both excitability and conduction,[5] the divergence of opinion in the literature regarding K administration in patients with malfunctioning pacemakers is understandable. The choice of therapy in any given patient will depend on the plasma K level. Moderate to marked hyperpotassemia should be avoided. However, in patients who are normokalemic or hypokalemic with pacemaker failure either because of subthreshold strength of the pacemaker stimulus or a physiologically increased excitability threshold, a trial of K administration is warranted realizing that the result may be unpredictable. In general, those patients in whom the heart responds to pacemaker stimuli falling in the supernormal phase but not at other times are probably most likely to respond to K administration. The effect of K is transient, lasting only as long as the K is being administered. Thus, although such therapy may be used for a period of hours or even days, K administration serves only as an interim procedure.

It must be pointed out that the rate of administration of K in Case 2 and 3 was rapid and justified only in cases of great urgency and when resuscitative measures are readily available. The commonly accepted rate of administration of K is about 0.5 to 0.75 mEq per minute. Furthermore, following the rapid intravenous administration of K, determinations of the venous plasma K do not as a rule reflect the concentration of the cation perfusing the myocardium.

Summary

Three patients with implanted cardiac pacemaker failure which responded to K administration are reported. The effect of changing K concentration on the ventricular excitability threshold was studied in one patient. A brief discussion of the factors to be considered in assessing the excitability threshold for the whole heart is included. It is concluded that a trial of K administration is warranted for interim management of normokalemic or hypokalemic patients with certain types of malfunction of implanted cardiac pacemakers.

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Cardiac catheterization carries a slight risk but, when done carefully after all other diagnostic procedures have been completed, furnishes information valuable enough to more than justify the risk.

Role of Cardiac Catheterization in Clinical Cardiology

(Based on 704 Consecutive Studies)

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UNDOUBTEDLY one of the greatest advances in clinical cardiology has been the development of cardiac catheterization. This technic not only has become the most accurate diagnostic tool for the assessment of hemodynamic abnormalities, but it also has introduced sound physiologic principles into our basic understanding of cardiovascular disease. In addition, by correlating clinical findings with hemodynamic data, this technic has improved and refined the diagnostic accuracy of the physical examination and the more routine diagnostic procedures such as electrocardiography and phonocardiography. Probably the greatest impetus to the development of cardiac catheterization has been provided by the progress made in cardiovascular surgery. The surgical advances have made it imperative to make accurate hemodynamic diagnoses in patients with potentially correctable cardiovascular disorders. Thus, all physicians who care for patients with cardiac disease need to have a working knowledge of the role eardiac catheterization can play in managing these patients.

The purpose of this article is to use the experience with over 700 cardiac catheterizations to review the value, the indications and the risks of cardiac catheterization. This report includes 704 diagnostic procedures done in one adult cardiac catheterization laboratory since July, 1962. Not included are the more limited procedures such as the insertion of transvenous pacemaker catheters or catheter insertion merely for angiographic studies. Of the 704 procedures, 23 consisted of right heart catheterization alone, 306 examinations included right heart and retrograde left heart catheterizations and 375 procedures constituted simultaneous right heart, retrograde left heart and transseptal left heart catheterizations.

Information Obtained

Evaluation of intracardiac valves or valve orifices: A valve or orifice which is significantly stenotic will produce a pressure gradient across the narrowed area.[1] With rare exception, a pressure measurement can be obtained on both sides of the obstruction and a fairly accurate estimation of the degree of stenosis can be determined. Valvular insufficiency was difficult to evaluate until the advent of selective cineangiocardiography.[2] Earlier catheterization technics relied on the shape of atrial pressure curves.[1] Such pressure curves have since proven to be misleading in many cases. Selective cineangiocardiography is quite accurate for determining aortic or mitral incompetence. Evaluation of pulmonic or tricuspid insufficiency with selective cineangiocardiography is less satisfactory. With current technics the catheter must traverse the valve in question. With the pressure injection necessary for the cineangiograms, the catheter recoils, holds open the valve, and some of the contrast material invariably leaks through an otherwise competent valve.

Another method of evaluating valvular insufficiency is by having a catheter on both sides of the valve in question; injecting Cardiogreen dye into the distal catheter and sampling for regurgitant dye through the catheter proximal to the valve.[3] If the valve is competent, dye does not appear until it has traversed the entire circulation. With regurgitation, the proximal catheter detects dye within a few seconds after it is injected. This technic seems to be more reliable for evaluating tricuspid and pulmonic insufficiency than cineangiography. Even though the catheter must again traverse the valve being examined, there seems to be less factitious insufficiency with the indicator-dilution method. The difference may be that only 1 ml of Cardiogreen dye is injected by hand with the indicator-dilution method whereas the angiographic method requires the injection of 30 ml of contrast material under pressure. As stated before, the pressure injection whips the catheter about and may contribute to the factitious insufficiency.

Shunts: There are at least four different ways in which intracardiac shunts can be detected with present

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Supported in part by the Herman C. Krannert Fund, U.S.P.H.S. Grants HE-6302, HTS-5363 and HE-5749 and the Indiana Heart Association.

catheter technics. First of all, the catheters can be maneuvered so that they traverse the defect. Secondly, a step up or step down in oxygen content (depending on the direction of the shunt) can be noted in the blood samples drawn from the different cardiac chambers. This method is probably the least reliable and least sensitive. A small intracardiac shunt can be easily missed with blood oxygens alone. Judicious use of indicator-dilution dye curves can make the detection of shunts very accurate.[1,3] By injecting dye into the chamber proximal to the shunt and sampling blood from or just beyond the chamber into which the shunt flows, even the smallest shunts can be detected. Selective cineangiocardiography represents the fourth method of localizing cardiovascular shunts and is also quite accurate.

Physiologic information: Blood flow can be determined by either the direct Fick method,[4] which relies on blood oxygen determinations and a measurement of oxygen consumption, or by the indicator-dilution principle which depends upon the area inscribed under the time-concentration curves.[5] The cardiac output both at rest and with exercise is a very important determinant in the overall evaluation of the patient's cardiovascular status.[6] A measurement of blood flow is also quite important in judging the importance of a pressure gradient. A given pressure gradient is indicative of a more severe obstruction if the flow is small than if the same gradient is associated with a high blood flow across the obstruction.

Resistance across various vascular beds, especially the pulmonary vascular bed, represents another important physiologic determination. Pulmonary vascular resistance is determined by dividing the difference in mean pressures in the pulmonary artery and the pulmonary veins by the pulmonary blood flow. The pulmonary venous pressure is represented by either the pulmonary capillary wedge or left atrial pressures. The degree of resistance significantly influences the patient's prognosis and management.

Some evidence of ventricular function can be obtained from the ventricular pressure curves.[7] There is an upper limit of normal for the end-diastolic pressure in each ventricle. An end-diastolic pressure which exceeds these limits usually indicates a diseased ventricle. The contour of the ventricular pressure tracings may also provide some information concerning ventricular activity. In patients with constrictive pericarditis or so-called "restrictive type" cardiomyopathy, there is an early, rapid rise in diastolic pressure and a plateau throughout the rest of diastole. Such a pressure tracing is indicative but not pathognomonic of restriction to ventricular filling.

Pathologic anatomy: Selective cineangiocardiography adds a great deal of versatility to cardiac catheterization. Besides evaluating valvular insufficiency and intracardiac shunts, the radiographic technic permits a fairly accurate appraisal of any pathologic anatomy. This technic probably provides the most accurate means of evaluating individual cardiac chamber size, the exact location and size of intracardiac shunts, intracardiac space-occupying lesions such as clot or tumor, or the precise location of a stenotic lesion, i.e., whether it be valvular, subvalvular or supravalvular.

Indications for Cardiac Catheterization

There are no universal indications for cardiac catheterization. Each institution undoubtedly will define its own criteria, depending on the skills, needs and past experience of its staff.[8] The following is a list of the more common indications for cardiac catheterization used at our institution:

1. To make the primary diagnosis of a previously undiagnosed cardiac abnormality in a patient whose management depends upon an accurate diagnosis.
2. To determine the significance of multiple valvular lesions in a patient with rheumatic heart disease; for example, to answer the question whether a simple mitral commissurotomy is feasible in a patient with predominant mitral stenosis and clinical evidence of mitral insufficiency and/or aortic insufficiency.
3. To do a quantitative study to determine the severity of a potentially correctable condition; for example, aortic stenosis or pulmonic stenosis.
4. Routine cardiac catheterization on all patients who are to have heart surgery: (1) to confirm the clinical diagnosis, (2) to rule out any unsuspected abnormality, and (3) to objectively evaluate the patient's cardiovascular status so as to anticipate the risk of surgery.
5. To make a definitive diagnosis in a patient whose social well-being is seriously hampered by a confusing clinical picture; for example, a patient who cannot get insurance or employment because of a murmur of obscure etiology or a patient who is a cardiac cripple because of an obscure murmur.

The accuracy and the type of information available with cardiac catheterization also makes it ideal for investigative studies. However, any extension of the indications into the field of clinical investigation must be done with the patient's full knowledge and consent and must be performed in a laboratory staffed with experienced personnel so that all risks are kept to an absolute minimum.

Risks and Complications

The more common complications of cardiac catheterization fall into the following categories: (1) arrhythmias, (2) cardiac perforation, (3) complications at the site of catheter insertion, (4) emboli, (5) foreign bodies due to catheter equipment and (6) infection. (1) The arrhythmias associated with cardiac catheterization may or may not be catheter induced. The most common arrhythmia is sinus bradycardia and even varying degrees of AV block due to vasovagal reactions. This situation is

of course promptly relieved with parenteral atropine and offers no significant hazard to the patient. Whenever the catheter touches the heart, ectopic impulses will be produced and should not be considered as a complication. Thus, we define arrhythmias as those which persist after removal of the catheter stimulus. A frequent arrhythmia of this type is atrial flutter or fibrillation. This arrhythmia occurs only if the atria are basically diseased. Usually there is a previous history of intermittent supraventricular tachycardia. This condition again offers little risk to the patient. The arrhythmia usually lasts only a few minutes or at most a few hours. Of course, the abnormal rhythm could be terminated at any time with the electrical defibrillating equipment available in the catheterization laboratory; however, thus far it has never been necessary to terminate such an arrhythmia in this manner.

Ventricular tachycardia or fibrillation is a potential hazard, but is fortunately very rare. We have had only one patient with ventricular fibrillation and this patient also had a perforated heart. Again even this arrhythmia can be readily handled by the defibrillatory equipment available.

(2) Cardiac perforation is probably the complication which offers the greatest risk to the patient. This hazard has increased somewhat in recent years because of the advent of percutaneous catheter technics, the transseptal catheter technic and selective cineangiocardiography. Percutaneous catheters, of necessity, must have tapered tips and must be a little more rigid than the usual catheter. As a result, increased care must be used when manipulating them. Fortunately cardiac perforation is usually preventable and even when it does occur, it need not prove fatal. Experience doing catheterizations is probably the best preventative for this complication. Almost all of our complications of this type occurred in our first year of operation.

The transseptal catheterization technic[9] has received the most publicity concerning cardiac perforation. Four of our cardiac perforations, including our only fatality, occurred with this procedure. These four complications represent the sum total in 375 transseptal catheterizations. As might be expected, the potential hazard is that instead of puncturing the interatrial septum, the free wall of the right atrium is perforated. Another possibility is puncturing the root of the aorta, especially when it is dilated as with aortic stenosis. We have modified the transseptal technic slightly and feel that the change has kept down our complications. Pressure is constantly monitored through the transseptal needle while the needle is being manipulated. Thus, if we perforate the free atrial wall or the aorta, we know immediately and the transseptal needle, which is only 21 gauge at the tip, is withdrawn. This small needle does essentially no damage.[10] It is only when the 8½ F transseptal catheter is unknowingly advanced into the pericardial sac or aorta that disasterous consequences ensue. We have punctured the aorta with the transseptal needle on several occasions and there have been no untoward reactions. The catheterization was continued in all cases, and subsequent aortic cineangiograms failed to demonstrate any abnormality. As with all phases of cardiac catheterization, the operator doing the transseptal catheterization must know when to stop.[10] There are certain situations in which the transseptal approach is not feasible. For example, surprisingly enough, in a patient with a giant left atrium there is frequently not enough of a right atrial cavity to maneuver the needle into the correct position, and the transseptal puncture cannot be done properly. A giant right atrium also may provide technical difficulty.[10]

Selective cineangiocardiography also possesses the hazard of cardiac perforation, especially when combined with the percutaneous catheter. The catheter may be partially imbedded into the myocardium and with injection of the radiopaque material, the dye may extravasate into the myocardium and eventually penetrate into the pericardial sac. Two of our early cardiac perforations were due to this complication. The biggest factor which minimized this hazard was the introduction of radiopaque teflon catheters. When we used non-opaque catheters, we never knew the exact location of the catheter, and thus it may have been deeper in the ventricle than anticipated. Greater experience also has contributed to decreasing this hazard. We have not had a significant complication with selective cineangiocardiography in over two years.

(3) Complications at the site of catheter insertion consist of arterial occlusion, pseudoaneurysm formation, post catheterization bleeding and thrombophlebitis. Arterial occlusion occurs most often when the brachial artery is used for introduction of an arterial catheter. As a result we prefer the femoral or axillary arteries for catheter insertion. These arteries are larger and possess better collateral circulation. We have yet to experience arterial occlusion as a complication of cardiac catheterization.

The percutaneous arterial technic popularized by Seldinger possesses the potential hazard of pseudoaneurysm formation. The small site of arterial perforation may continue to bleed and may eventually communicate freely with a clot, which then contains pulsatile blood flow and represents the pseudoaneurysm. This complication is prevented by making certain that all bleeding has ceased before dismissing the patient from the catheterization laboratory. Surgical repair of pseudoaneurysms is fairly simple. The false aneurysm or old clot is easy to remove and usually only one stitch is necessary to close the patent arteriotomy site. We have had one pseudoaneurysm secondary to a brachial arterial needle.

Thrombophlebitis is a distinct hazard especially in patients with high venous pressure and in patients who do not ambulate following the catheterization. We routinely have patients walking within six hours after the

catheterization or at least have them exercising the extremity in which a venous catheter was inserted. We have had three episodes of post cathcterization thrombophlebitis. All three patients did not ambulate as desired. One of the patients developed a conversion hysteria following catheterization and refused to get out of bed for about three or four days. Post catheterization bleeding is again dependent upon the care taken to make certain that all bleeding ceases before sending the patient back to the ward.

(4) Either air or blood clot emboli represent another potential danger with cardiac catheterization. Meticulous care to avoid the introduction of air into the catheter is the only way to avoid air emboli. The prevention of blood clot emboli also requires constant flushing of the catheters with heparinized solutions. The dislodging of intracardiac clots has been reported. There also has been a report of a clot forming at the site of a transseptal puncture. We have done transseptal punctures on several patients with large left atrial thrombi but have never knowingly produced any emboli. There have been two patients with calcific aortic stenosis who developed transient hemiparesis during the catheterization. Both patients had similar symptoms before catheterization, so it is difficult to determine whether or not an embolus was responsible for the symptoms.

(5) There has been an assortment of intact or broken catheterization equipment reportedly left in patients as foreign bodies. For example, the catheter may tie itself into a knot and have to be removed surgically. Parts of the catheter have reportedly broken off and lodged in various parts of the body. Guide wires and transseptal needles have also been reported to break off and necessitate surgical removal. We have had only one foreign body complication. We were attempting a percutaneous arterial catheterization of the brachial artery. The guide wire was not in the artery and when trying to pull it out, part of it broke off and remained in the upper arm. Although the fragment was clearly visible on a roentgenogram, it could not be found at surgery; so to our knowledge, the 1½ inch fragment of stainless steel guide wire is still in the patient's upper arm.

(6) Bacteremia and endocarditis have been reported following cardiac catheterization, however, in our experience it has been rare. We cover our patient with antibiotics but take relatively few precautions in the catheterization laboratory. We had only one patient who was suspected of having developed bacterial endocarditis and he was treated. The diagnosis, however, could not be confirmed with positive blood cultures.

A summary of our own complications with 704 catheterizations including 375 transseptal catheterizations is as follows: we have had only one fatal complication. This was due to a cardiac perforation following transseptal catheterization. The patient was very ill before catheterization and as soon as cardiac tamponade occurred, he developed ventricular fibrillation and attempts to revive him failed. The transseptal procedure was done without monitoring pressure through the transseptal needle, and the accident prompted the change in the technic.

There have been 14 cases in which complications due to catheterization necessitated prolonging the hospital stay. Seven of these patients had cardiac perforation, three by the transseptal route, two with selective cineangiography and two with direct catheter perforation. Only one of these cases occurred within the past two years. Of the seven patients with cardiac perforation, only three required pericardiocentesis and none developed any difficulty once they left the catheterization laboratory. The other seven cases consisted of three patients with thrombophlebitis, one with heart block which lasted two days, one with the broken guide wire, and two patients with unexplained hypotensive episodes requiring an extra day of hospitalization for observation. Aside from the patient who had the broken guide wire left in her arm, and the patient with a pseudoaneurysm of the brachial artery, none of our patients with complications required surgical intervention and none have any residual sequelae to our knowledge.

There are certain principles which should be followed in order to obtain the maximum amount of information with the minimum amount of risk to the patient. First of all, the duration of the procedure should be as short as possible. The biggest complaint that the patients have is that their backs get tired lying on the hard table. Furthermore, with a long procedure, not only the patient, but also the technicians, nurses and doctors get anxious and restless. Many of our early complications occurred when the study was quite prolonged. Under such a situation there is a tendency to hurry the procedure and the possibility of becoming careless is increased. As a consequence, our standard procedure is organized to decrease the time required for the catheterization and to make the patient as comfortable as possible so that the study can be done in a relaxed atmosphere. Patient comfort is provided by a nurse whose primary responsibility is the patient's well-being. It is her duty to inform us of every ache and pain which the patient might have. We also have music playing in the laboratory to help the patient relax. Although it was not intended for that purpose, some patients enjoy watching the catheterization procedure on the closed circuit television screen. Under these conditions sedation with its added potential hazards is rarely necessary. When more than one catheter is to be used, the catheters are all put in at one time and we attempt to anticipate each manipulation so that no time is wasted. A typical study, which consists of a simultaneous right heart, transseptal and retrograde left heart catheterization, resting and exercise Fick cardiac outputs, appropriate indicator-dilution curves and selective cineangiocardiography takes about two-and-a-half to three hours.

For various reasons we have adopted the policy of doing fairly complete

hemodynamic studies. We have found that the incidence of finding unsuspected useful information far exceeds the slightly added risk to the patient. The so-called limited catheterization studies almost invariably end up as long, dragged out procedures with data of questionable value. If one catheterizes merely to make the primary diagnosis, he runs the risk of having to do a repeat catheterization later because of something he missed or because of a question which is raised after the data is reviewed. Our attitude has been that if a patient is going to subject himself to cardiac catheterization, we should obtain as complete a hemodynamic workup as possible without subjecting him to any undue risk. All possible clinical uncertainties should be clarified so that there should be no need for a repeat study.

Summary

Despite all of the potential and reported complications associated with cardiac catheterization, we are convinced that if the proper precautions are taken, the examination can be and should be a very safe and highly informative diagnostic procedure.

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From *The Journal* 50 Years Ago

. . . Everyone knows that any cutting operation allows an avenue for mixed infection. Cutting into a hip joint in order to give a local iodin or some other drug treatment is creating a chance for harm. After this is done then what?

Well, as a rule, the proper therapeutic measures must be resorted to, the same as should have been done before the cutting, viz., rest, fresh air and maybe tuberculin. Instruments for rib resecting and aspirating tocars are becoming rusty and dusty. Why? Because the profession is learning that every pleurisy with effusion should not be tackled by the above mentioned instruments of torture. Letting well enough alone is a good thing to practice in most pleurisies. Chronic pleurisy and frequent attacks of acute pleurisy should be looked upon with suspicion. They are usually tuberculous. If not, they can be made so by such operations as rib resection and aspirating. Most effusions accompanying pleurisy are harmless and are Nature's own cure by the hydrothorax route. Treat the tuberculosis without producing a plus to give additional worry.

Surgeons do bring about many avoidable pluses in relation to tuberculosis. If they must operate, a local anesthetic should be used whenever possible, but when a general anesthetic is absolutely required, gas is the only logical one. No patient of mine with any form of tuberculosis shall ever get ether. It is doubtful whether there is any avoidable agency that produces more fired-up conditions in tuberculosis than ether. . . . Alfred Henry, M.D., Indianapolis, "Tuberculosis Plus," *JISMA*, February, 1917.

The hemodynamic function of the heart as a pump is dependent on at least three variable factors which operate concurrently but independently.

The Determinants of Myocardial Performance

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A VIRTUAL renaissance, still in process, has taken place over the past 10-15 years regarding concepts of mammalian myocardial physiology and function. Various investigators have challenged, refuted, and finally reaccepted, with qualifications, the traditional Law of the Heart as an important determinant of cardiac function. There is now a general consensus, however, to the effect that myocardial performance is the product of at least three principal variables inherent in the constitution of the myocardial fibers. It is the purpose of this review to define briefly the nature and applicability of these intrinsic properties.

Frank-Starling Law

Any review of factors affecting myocardial performance must initially consider the Frank-Starling[1] Law of the Heart. This latter hypothesis has for decades been accepted, without question, as the criterion by which cardiac performance must be judged (Figure 1). The advent of cardiac catheterization and open-heart surgery, however, providing an opportunity for amelioration or correction of increasing numbers of cardiac disorders, both congenital and acquired, has revived concern over matters which had hitherto been of little more than academic import. For it is now incumbent upon the clinician to assess, preoperatively, the adequacy of myocardial function. And, while the measurement of left ventricular end-diastolic pressure had long been considered suitable for such purposes, in accordance with traditional Frank-Starling concepts, numerous investigators have expressed growing concern over the adequacy as well as the validity of such a single measurement in the evaluation of a function as complex as myocardial contraction.

A portion of this dilemma may be resolved by a review[2] of the original studies of Frank and Starling, to distinguish what was actually found by these investigators from what they are alleged to have found. To begin with, the two investigators, working independently, did *not* arrive at the same conclusion regarding the factor most pertinent in determining the maximal force exhibited by myocardial contraction. While both found a direct correlation between the force of myocardial contraction and the resting length and tension of the isolated heart muscle (analogous to the end-diastolic volume and pressure, respectively, of the intact ventricle), Frank felt that resting tension and length maintained a fixed relationship with one another and, hence, either parameter could be utilized to describe the state of myocardial function.

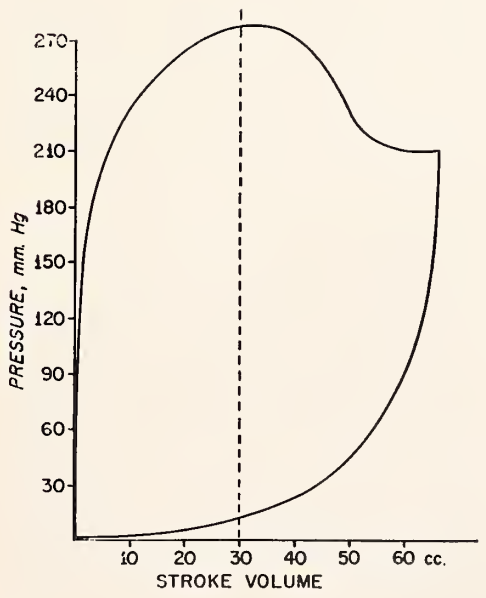


FIGURE 1

THE FRANK-STARLING CURVE. With a progressive increase in resting tension (lower line), the myocardial force generation (upper line) is increased. Ultimately, at greater resting tension, further increase in the resting tension first produces no change and, then, a decrease in force generation. (From Rushmer, R.: Cardiovascular Dynamics, 2nd edition; reprinted with permission of W. B. Saunders Co., Philadelphia, Pa.)

Starling, on the other hand, contended that resting length and tension could not be equated, that one varied independently of the other on occasion, and that resting length of the muscle fiber (i.e., end-diastolic volume) was more pertinent in the assessment of cardiac function. This dispute was never directly resolved by the two investigators; and subsequent students,[3] while tending to favor Frank's view that length and tension were equivalent, achieved inconclusive results. As a consequence, the notion became prevalent that left ventricular end-diastolic pressure was an acceptable and consistently valid criterion of left ventricular function (such a conclusion may have gained favor, in part, for reasons of expediency; left ventricular volume determinations, then, as now, were uncertain and inadequate).

More recent studies[4] have clearly vindicated Starling, however, in that

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Supported in part by the Herman C. Krannert Fund, U.S.P.H.S. Grants HE-6308, HTS-5363 and HE-5749 and the Indiana Heart Association.

it has been shown that resting length and tension of myocardial fibers do indeed bear a variable relation to one another (described as myocardial compliance) under certain circumstances (Figure 2). Aortic stenosis, of whichever type, or sustained hypertension with resultant left ventricular hypertrophy, e.g., are associated with a *decrease* in myocardial compliance (i.e., a state wherein an increment in diastolic volume yields a disproportionately larger increase in diastolic pressure). Thus, in the above-mentioned states, end-diastolic volume may be normal or even low, with an elevated end-diastolic pressure.

Conversely, in some cardiac disorders associated with a marked diastolic overload (mitral insufficiency, e.g.), left ventricular end-diastolic volume may be substantially increased with little or no increase in end-diastolic pressure (i.e., *increased* myocardiac compliance). Thus, it is apparent that determination of left ventricular end-diastolic pressure does not provide a consistent assessment of the state of left ventricular function in all cases. And, while Starling may well have been correct in assigning greater significance to resting fiber length as a parameter of myocardial function, the uncertain relation of end-diastolic volume to left ventricular end-diastolic pressure (LVEDP) renders any hemodynamic diagnosis of congestive heart failure somewhat tentative. In other words, the hemodynamic diagnosis of congestive heart failure may, itself, be suspect. The establishment of reliable methods of measuring LV volume may be of assistance in resolving this dilemma, but it is likely that more definitive hemodynamic criteria of cardiac compensation will ultimately be necessary.

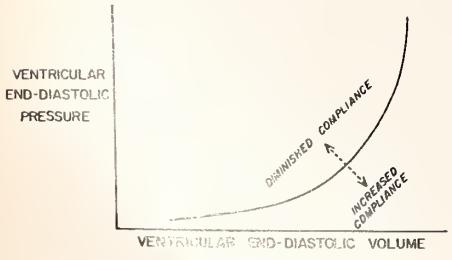


FIGURE 2

PRESSURE-VOLUME RELATION. It is to be noted that a substantial increase in end-diastolic volume may occur without change in end-diastolic pressure, up to a point, in the case of "normal" compliance. Shifts in the "compliance" curve, denoting an altered pressure-volume relation, are indicated by the arrows. With diminished compliance, a similar volume increase yields a greater LVEDP. With increased compliance, the same volume increase produces a smaller increase in LVEDP. (From Braunwald, E., and Ross, J., Jr.: Am. J. Med. 34:147, 1963; reprinted with permission of R. H. Donnelley Corp., New York.)

The Frank-Starling concepts regarding the regulation of cardiac function have proved less than adequate in other ways as well. It has been repeatedly observed, e.g., that neither the animal nor the human heart functions consistently in accord with the Frank-Starling principle. In fact, the traditional "Law of the Heart" appears to be obeyed rather infrequently, and in an obvious manner only in relation to postural adjustments.[2] In contrast, the cardiac response to exercise appears to be quite the converse of what one would anticipate from a consideration of the dicta of Frank and Starling. Cardiac output is not increased during exercise as a consequence of an increased venous return, as one would anticipate; rather, the stroke volume may remain unchanged or even diminish, while heart size tends to be reduced. Instead, the increased cardiac output appears to result largely from the increase in heart rate.

Traditional concepts have also faltered in that a demonstrable "downward slope" of the Starling curve has not been demonstrated clinically in the normal heart. Most experimental and clinical studies[5,9] have failed to demonstrate a reduction in stroke volume with increasing venous return; in contrast, a "plateau" has been reached, at which point further infusion of blood or saline produces no change in stroke volume.

It has been suggested, by some,[2] that a portion of the clinical inapplicability of the Frank-Starling concept stems from the fact that their original experiments were highly unphysiologic. They were, to begin with, performed in open-chest dogs, in which circumstance heart size becomes significantly reduced. Systolic contraction, in this state, virtually empties the ventricle; while the stroke volume, in the normal, constitutes 50-60% of the end-diastolic volume. Thus, it would seem unlikely that an increase in venous return would *not* produce an increase in end-diastolic volume and, hence, an increase in stroke volume, in the presence of such a contraction in heart size. And, perhaps more importantly, the influence of autonomic regulation of cardiac function was precluded by the administration of anesthesia in these experiments. Accordingly, only one variable, that of venous return and ventricular filling, was of functional significance in these studies. In the absence of the chronotropic and inotropic contribution of neurohumoral factors, therefore, one could hardly describe these classical experiments as simulating a physiologic state.

Contractility (Inotropy)

Observers have long considered the quality or vigor of myocardial contraction as a possible source of variation in myocardial performance. This attribute, so well exemplified by the cardiac response to adrenergic drugs, has been ill-defined, however, and extremely difficult to describe in objective terms. The term "contractility" or inotropy has been applied to this attribute, nevertheless, resulting unfortunately in a great deal of confusion about the meaning of the term. "Contractility" has, as a result, been applied rather vaguely to a host of physiologic and clinical phenomena; while it has rarely been apparent to the reader whether the term referred to the strength or speed of contraction, or both.

It remained for the work of Hill,[6] Abbott and Mommaerts,[7] and Sonnenblick[8] to define and delineate, in objective fashion, the concept of myocardial contractility. These investigators, following the classic papers of Hill on the force-velocity relation in skeletal muscle, determined that a similar relation was inherent in cardiac muscle as well. That is, it had been

demonstrated in skeletal muscle that the force generated in contraction was inversely proportional to the velocity of shortening of the contractile elements. This same relation, again, was found to be characteristic of myocardial muscle; while cardiac muscle appears to possess the unique capacity to alter the force-velocity relation independently of resting fiber length.

Figure 3 illustrates the basic force-velocity relation as constructed by Sonnenblick. It may be observed that the speed of fiber shortening is greatest at the onset of contraction, at which point no load is encountered by the contractile elements and, hence, no force is generated. At this juncture, the velocity of fiber shortening is maximal (labeled Vmax. by Sonnenblick). Subsequently, as the contracting fiber encounters a greater load, generating an appropriately greater force, the velocity of shortening is reduced. Ultimately, with the expression of maximal force (P_o), contractile element shortening ceases.

A number of sophisticated studies, employing both the in-vitro papillary muscle of the cat and the in-vivo human heart, have demonstrated that the force-velocity relation can be altered by a number of inotropic interventions, such as an increased frequency of contraction or the administration of epinephrine, digitalis or calcium. As shown in Figure 4, such enhancement of the contractile state may be characterized *primarily* by an increase in the maximal rate of fiber shortening (Vmax.), with or without a change in the maximal force generated. In either case, however, the time required to achieve maximal shortening of the fiber, maximal force generation, and maximal rate of force development is consistently abbreviated. Further study has revealed, moreover, that the force-velocity relation of the myocardium, as characterized by Vmax., may vary quite independently of the resting length of the muscle fibers. In Figure 4, as noted above, an inotropic intervention alters Vmax. without a change in resting fiber length, with or without a change in maximal force generated. In Figure 5, conversely, it is apparent that alterations in the resting fiber length may alter the maximum force generated in contraction (in accordance with traditional Frank-Starling concepts) without altering Vmax. (a reflection of the unchanged contractile or inotropic state of the muscle).

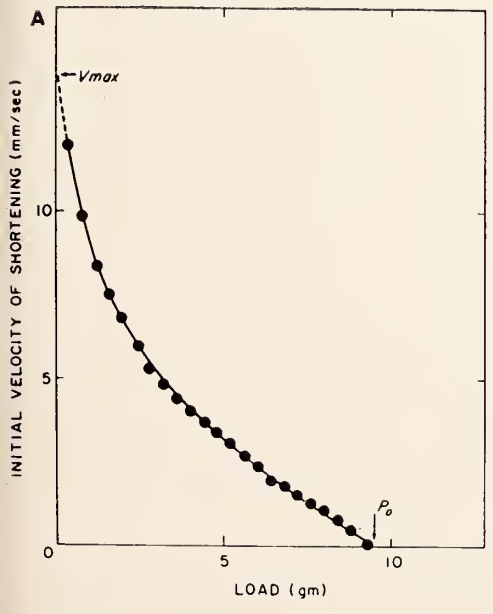
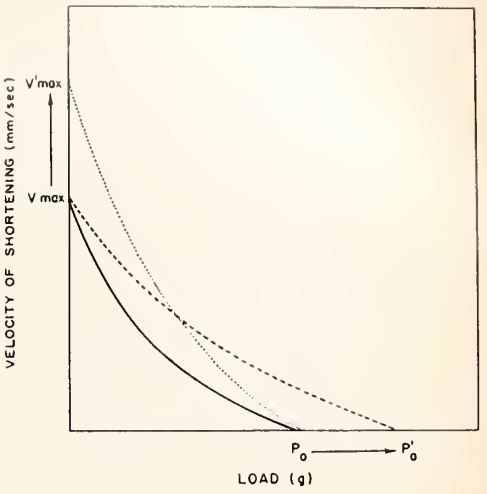


FIGURE 3

FORCE-VELOCITY CURVE. This diagram illustrates the inverse relation between the velocity of contractile shortening and the force borne by the contracting fiber. At zero load, the velocity of shortening is maximal (the curve here is extrapolated to zero load). The intercept is labeled Vmax. Conversely, maximal force generation occurs when the velocity of contractile shortening is zero. (From Sonnenblick, E. H.: The Myocardial Cell, University of Pennsylvania Press, Philadelphia, 1966.)



EFFECTS OF INTERVENTIONS ON THE FORCE VELOCITY RELATIONS OF THE CAT PAPILLARY MUSCLE

	V max	Po
INCREASING LENGTH	—	↑ ↑
INCREASING RATE	↑	↑ or —
NOREPINEPHRINE	↑ ↑	↑

FIGURE 4

THE EFFECT OF INOTROPIC INTERVENTIONS UPON THE FORCE-VELOCITY CURVE. This illustration depicts the effects of inotropic intervention, such as an increased heart rate or norepinephrine administration, upon the force-velocity curve. A shift in the maximal velocity of shortening (Vmax ► V'max') results from such an enhancement of the inotropic state. No change in maximal force generation (P_o) need be produced by this force-velocity shift. An increase in resting fiber length does produce an increase in maximal force generation (P_o ► P'_o), however, without alteration in the inotropic state (Vmax). These effects are summarized in the table below the graph. (From Sonnenblick, E. H.: Fed. Proc. 21:975, 1962; reprinted with permission of the Waverly Press, Inc., Baltimore, Md.)

It has thus become increasingly apparent that there are two principal determinants upon which the functional characteristics of myocardial fibers are predicated. The first is constituted by the Frank-Starling principle which dictates that the maximum force that may be generated is directly related to the resting length of the myocardial fibers; while the second is that of the force-velocity curve which expresses an inverse relation between the velocity of contractile shortening and the force generated or load borne by the contracting fibers. The inotropic or contractile state of the myocardium is characterized by the *maximal* velocity of fiber shortening (Vmax.) which occurs at a time when the contractile elements are unencumbered by a load or resistance to shortening. It has also been demonstrated that the aforementioned basic factors may vary independently of one another, rendering any assessment of the state of myocardial function more complex than was apparent when one was confronted solely with the relative simplicity of either the Starling or ventricular function curves[9] (Figure 6).

The Active State

A review of the determinants of myocardial performance must also consider a third variable which has a bearing upon the expression of either of the two previously described myocardial functions. This third factor is that of the duration of the *active state*[10] of the

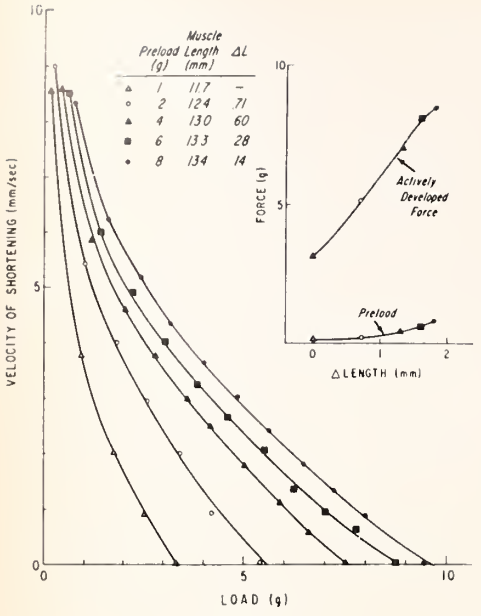


FIGURE 5

THE EFFECTS OF VARIATION IN RESTING FIBER LENGTH UPON THE FORCE-VELOCITY CURVE. An increase in resting fiber length is associated with a progressive increase in maximal force-generation (P_0) with no apparent change in the basic force-velocity state (as characterized by Vmax.; it may be observed that the force-velocity curves approach a common intercept). From Sonnenblick, E. H.: The Myocardial Cell, University of Pennsylvania Press, Philadelphia, 1966.)

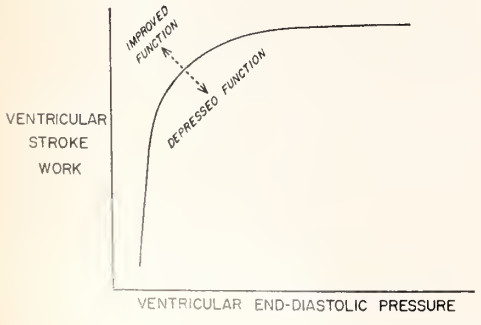


FIGURE 6

THE VENTRICULAR-FUNCTION CURVE. This curve expresses the relation of ventricular stroke work (a product of mean arterial pressure, minus left atrial pressure; and stroke volume) to left ventricular end-diastolic pressure. This relation is an obviously direct derivative of the Frank-Starling curve and has been employed in the clinical assessment of myocardial function. Sarnoff and Bergland,[9] have described the variability of the inotropic state as reflecting a "family of ventricular function curves"; i.e., at any contractile state, a ventricular function curve may be inscribed, relating stroke work to LVEDP, according to Frank-Starling concepts. (From Braunwald, E. and Ross, J., Jr.: Am. J. Med. 34:167, 1963; reprinted with permission of R. H. Donnelley Corp., New York.)

contractile elements. The active state, in turn, may be described as the *existence* of force generation or active shortening of the contractile elements. Thus defined, it is apparent that this so-called active state possesses both intensity and duration. The intensity of the active state, on the one hand, is characterized by the magnitude of force generated (P_0) and the velocity of contractile shortening relative to the force generated. These characteristics of the intensity of the active state have been described above with regard to the length-tension and force-velocity relations. The duration of the active state, on the other hand, merits further consideration. Studies have been performed[8] which demonstrate that the duration of the active state is directly proportional to the time required to reach peak isometric tension in in-vitro studies; thus an objective criterion is available for the assessment of active state duration. It has also been noted that the duration of the active state tends to vary inversely with the maximal velocity (Vmax.) of contractile shortening (an increase in heart rate, e.g., while associated with an enhanced force-velocity relation, also correlates with a decrease in active state duration, as shown in Figure 7).

It has been theorized, therefore, that the duration of the active state may limit the maximum force generated by stimulation at any resting fiber length or inotropic state. For example, an en-

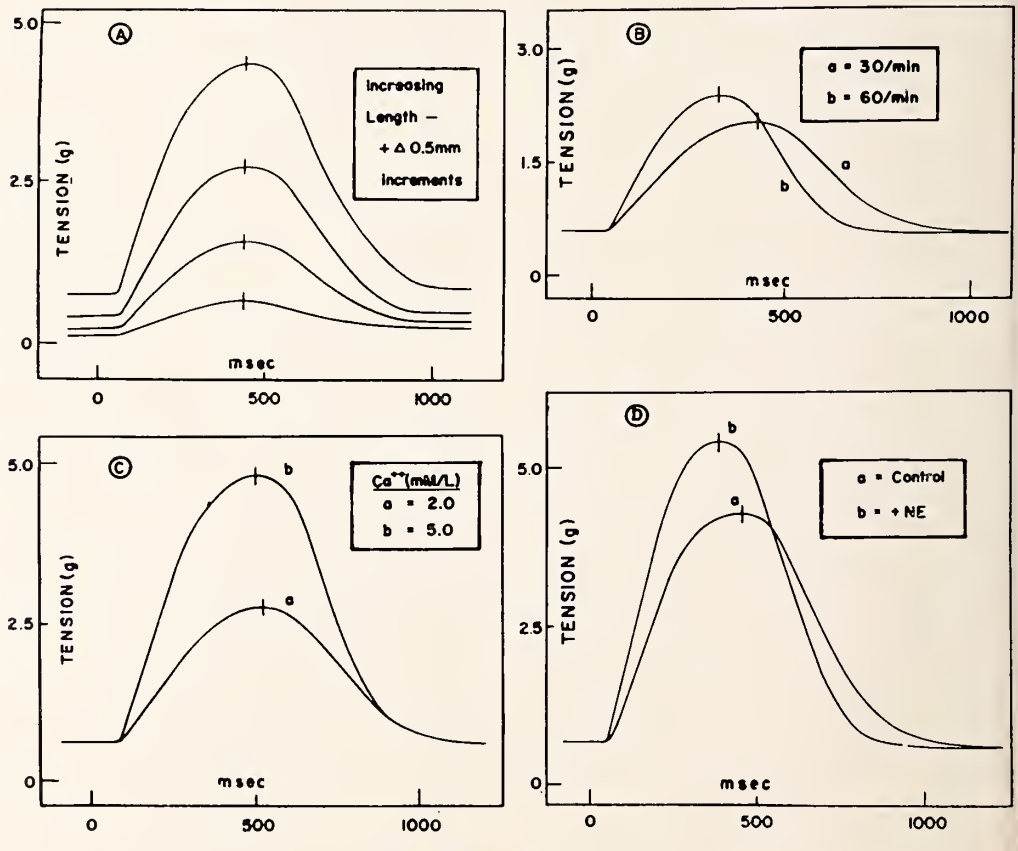


FIGURE 7

ISOMETRIC TENSION CURVES, FROM CAT PAPILLARY MUSCLE, demonstrating the relation of force generation to resting fiber length, and the force-velocity state as influenced by heart rate, calcium, and norepinephrine. In A, the influence of resting length and tension is demonstrated. Progressive increase in resting length (and tension) is reflected by an increase in force generation without change in time-to-peak tension (a reflection of active state duration) or in the basic force-velocity state (although the condition of the latter cannot be determined from this figure. In Figure B, an increase in force generation follows an increase in heart rate, without change in resting length or tension, and with a decrease in time-to-peak tension. One may assume, then, that this increase in force generation must reflect an enhancement of the force-velocity relation (an increase in Vmax., i.e.). Figures C and D, respectively, illustrate the influence of calcium and norepinephrine upon isometric force generation. As in B, an increase in force generation is observed without change in resting fiber length and with slight shortening of the time-to-peak tension. Thus, both calcium and norepinephrine administration are thought to produce inotropic enhancement (an increase in Vmax.). (From Sonnenblick, E. H.: Am. J. Physiol. 202:932, 1962; reprinted with permission of Waverly Press, Inc., Baltimore, Md.)

hancement of the inotropic state of cardiac muscle has been shown to be associated with an increase in heart rate alone (even in the absence of sympathetic stimulation or an increase in venous return). Nevertheless, despite the increased velocity of shortening, the force generation may remain unchanged (Figure 8). An explanation for this apparent paradox seems to lie in the well-established fact that active state duration is diminished at more rapid heart rates,[11] thus precluding the increase in force generation that might be anticipated. Another manifestation of the contribution of the active state duration to myocardial performance may be observed in the experimental animal rendered hypothermic.[12] In this state, an increase in contractile force generation may be seen in the absence of change in resting fiber length or force-velocity relation. Presumably, the resting fiber length determines the maximum force generated by contraction, but this may not be achieved because of the limited active state duration. Prolongation of the active state as a consequence of hypothermia may permit full expression of the force-generating capacity inherent at that resting fiber length (and at that force-velocity state).

Interaction of Factors

An assessment of myocardial performance must therefore conclude that the end result of cardiac contraction stems primarily from the interaction of these three factors. One must also remain cognizant of the fact that resting fiber length, the force-velocity state, and active-state duration may vary independently, influenced by a variety of neurohumoral and hemodynamic circumstances (although it should be remembered, in general, that Vmax. and active state duration tend to bear an inverse relation to one another). To begin with, an enhancement of the inotropic state, without change in resting fiber length or active state duration, may permit expression of the maximum force generation capacity (P_o) inherent at that fiber length and previously inexpressable due to the limitation of active state duration. And, as noted earlier, an increase in resting fiber length alone may permit greater force generation without change in the contractile state of duration of the active state. Finally, an alteration in active state duration may limit or permit full expression of the force-generating capacity inherent at an unchanging inotropic state and resting fiber length. These relationships are further illustrated in Figure 7. Failure to recognize and consider the complexities of such interrelationships, however, and a pedantic reliance upon the traditional Frank-Starling concepts, have rendered some clinical and experimental observations obscure and difficult to understand. Exercise, e.g., as mentioned previously, is associated with an increase in heart rate and cardiac output, with no change (or, pos-

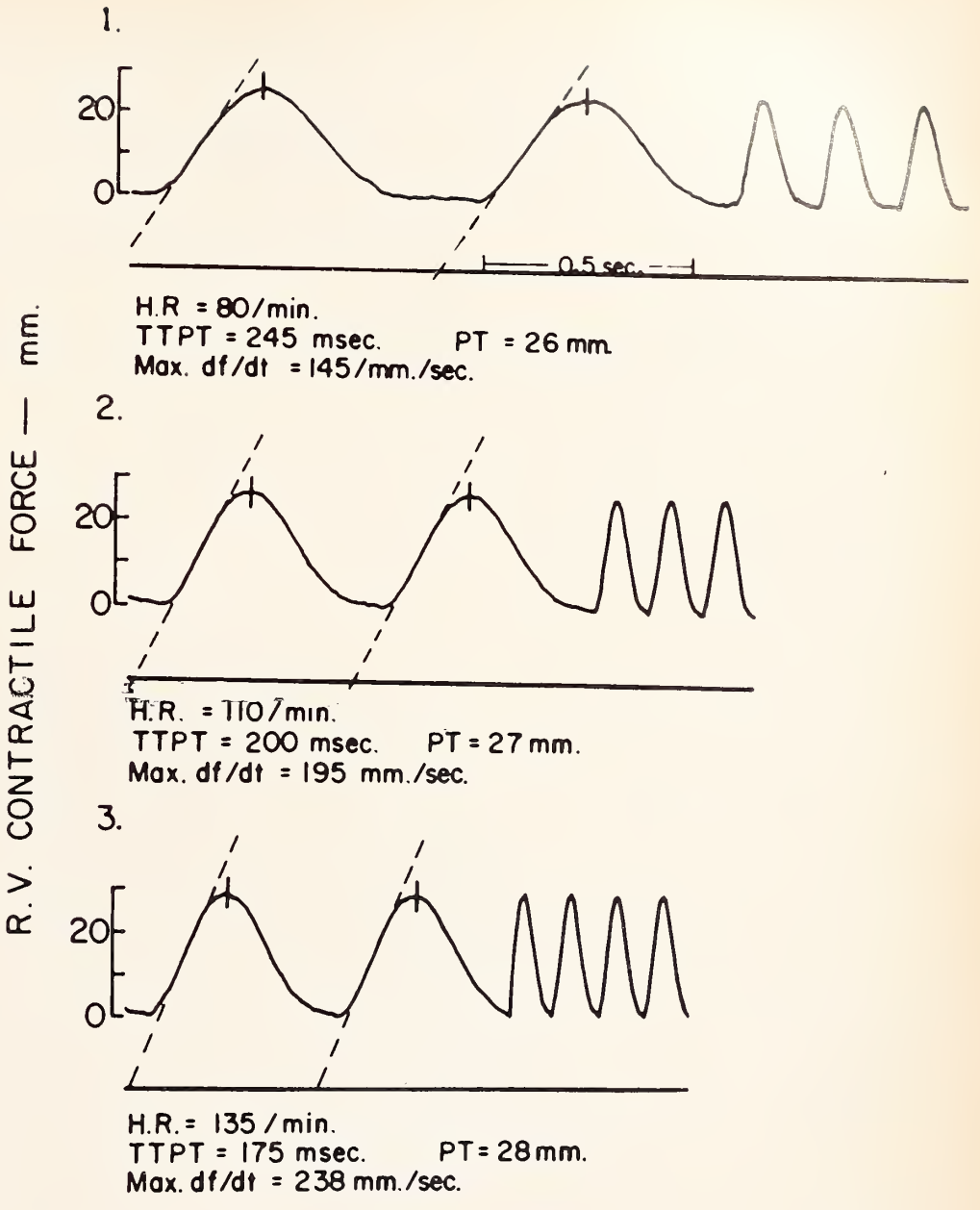


FIGURE 8

THE RELATION OF INCREASED HEART RATE TO ISOMETRIC FORCE GENERATION, reflecting the inverse relation of the force-velocity relation to active state duration. An increase in heart rate consistently produces an increase in the rate of force generation, (df/dt) without change in the maximal force generation (PT). The apparent reason for the lack of greater force generation, despite the increased rate of force generation, lies in the markedly decreased active state duration (reflected by the time-to-peak tension) at the more rapid rates. TTPT = time-to-peak tension of the slower control contractions. (From Sonnenblick E. H., et al.: Circulation 33:945, 1960; with permission of the American Heart Assn., Inc., New York.)

sibly, a reduction) in end-diastolic volume and stroke volume. Such findings have justified, to the minds of many, the concept that Frank-Starling mechanisms are not involved in the cardiac adaptation to exercise. More recent studies by Sonnenblick et al.,[13] however, have shown that exercise is indeed associated with an increase in end-diastolic and end-systolic dimensions, and stroke volume, when heart rate is excluded as a variable. That is, it has been shown that an increase in heart rate alone, in the absence of exercise (and, therefore, in the absence of an increased venous return), yields a definite reduction in these ventricular dimensions; while exercise, conducted at the same heart rate, occurs at larger ventricular dimensions. It therefore appears that Frank-Starling mechanisms are in fact operative in exercise adaptation, although somewhat masked by the effects of a concomitant increase in heart rate.

A second enigma, perplexing clinicians and physiologists alike for decades, lies in the apparent inefficacy of digitalis (regarding contractile performance, as assessed by the ventricular function curve) in the individual without manifest cardiac decompensation. The studies of Sonnenblick et al.[14] seem to have resolved this apparent paradox as well. The latter investigators have demonstrated that digitalis administration consistently enhances the inotropic state of the myocardium in normal subjects (i.e., the maximal velocity of shortening of myocardial fibers is increased), while reflex adjustments (involving ventricular dimensions and active state duration) mitigate the inotropic effect of digitalis sufficiently that stroke volume and cardiac output remain essentially unchanged. In the individual with myocardial decompensation, by contrast, the force-velocity relation is a limiting factor in myocardial adjustment; thus, inotropic enhancement without compensatory adjustments in ventricular size or active state duration effects an increase in stroke volume and cardiac output.

Summary

There are three principal factors or attributes of myocardial function which, operating concurrently yet independently, determine the net effect of ventricular contraction. These variables, the length-tension or Frank-Starling relation, the force-velocity relation and active state duration, have been defined and described in a somewhat simplified yet, hopefully, meaningful fashion. And, while much remains to be discussed about the inherent mechanochemistry and instantaneous time relations of these variables, the influence of "after-load", and the hemodynamic function of the heart as a *pump*, it is hoped that the above review may aid the student who wishes to pursue this subject further, and the clinician who seeks a broader understanding of myocardial performance than can be discerned from the concepts of Frank and Starling alone.

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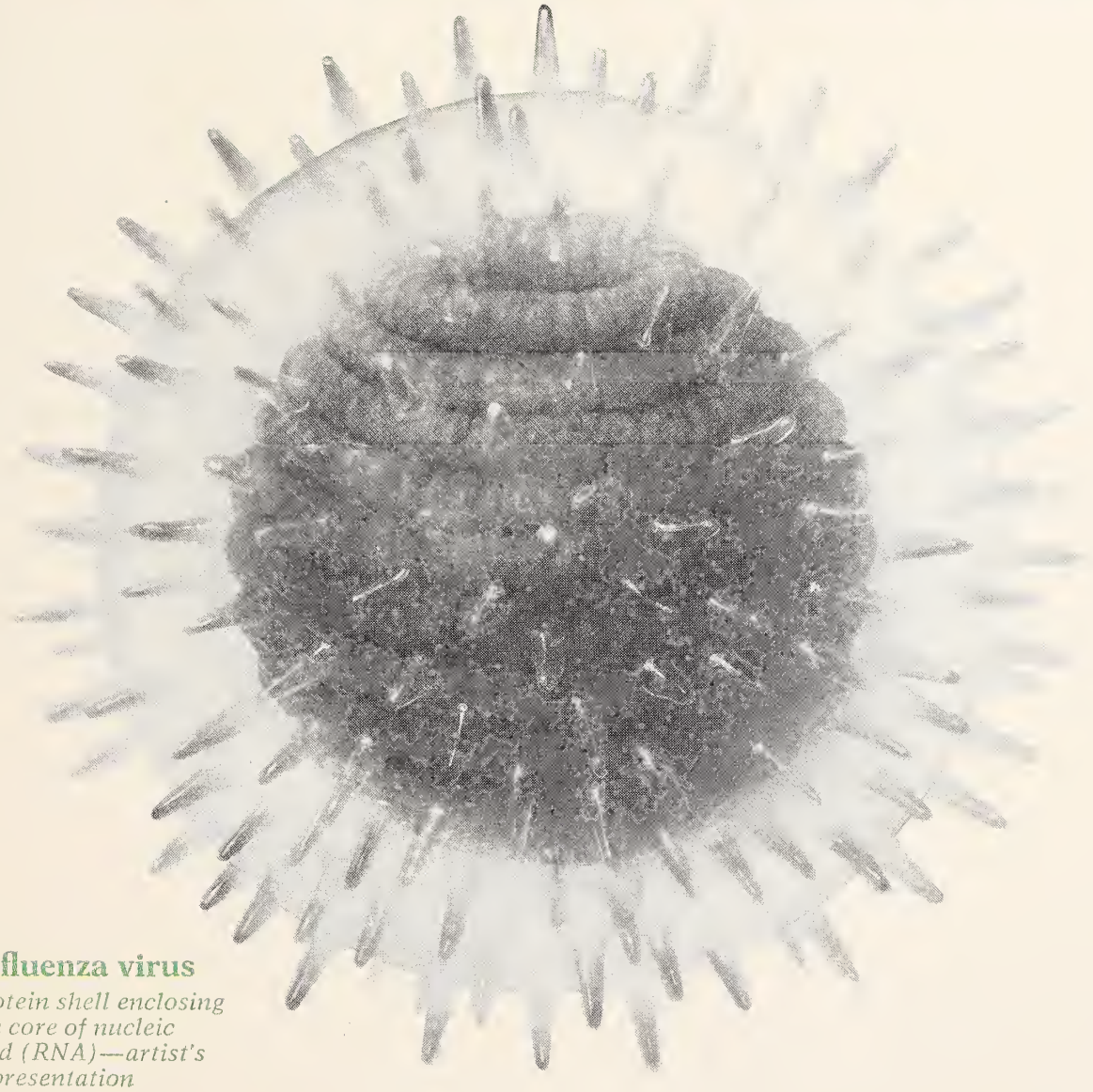
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The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

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What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

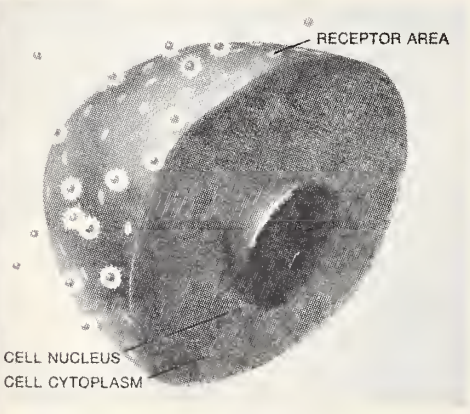
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

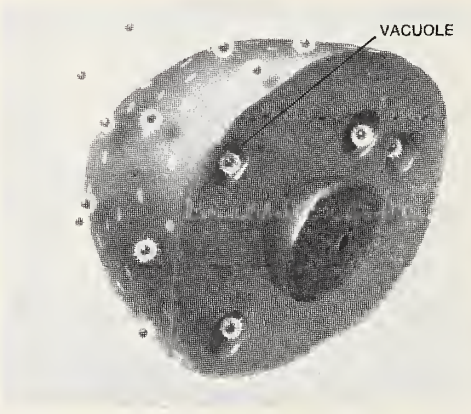
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

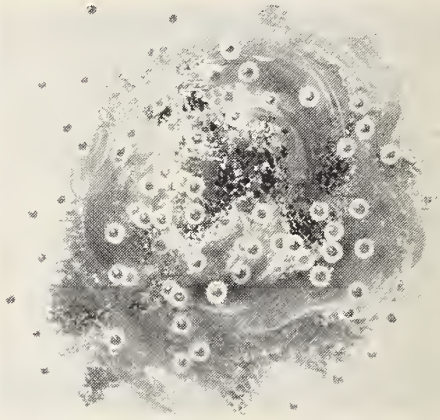
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

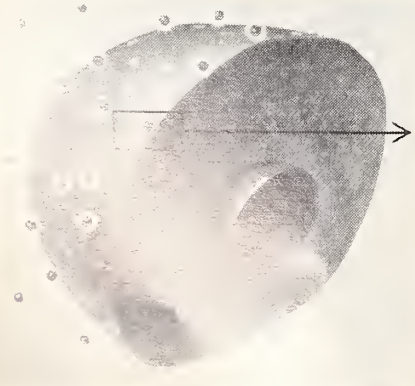


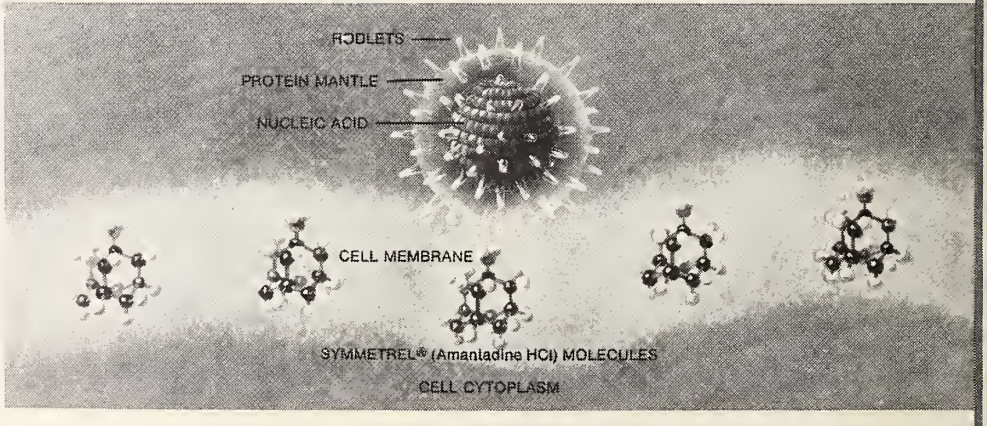
2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]





Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

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Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

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(Amantadine HCl)

A molecular barrier to virus penetration

arrest diarrhea

in • gastroenteritis • acute infections



LOMOTIL®

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . . 2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . . 0.025 mg.

Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- **Ulcerative colitis**
- **Acute infections**
- **Irritable bowel**
- **Regional enteritis**
- **Drug therapy**
- **Food Poisoning**
- **Functional hypermotility**
- **Malabsorption syndrome**
- **Ileostomy**
- **Gastroenteritis and colitis**

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg.	½ tsp. 3 times daily
6-12 months	4 mg.	½ tsp. 4 times daily
1-2 years	5 mg.	½ tsp. 5 times daily
2-5 years	6 mg.	1 tsp. 3 times daily
5-8 years	8 mg.	1 tsp. 4 times daily
8-12 years	10 mg.	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

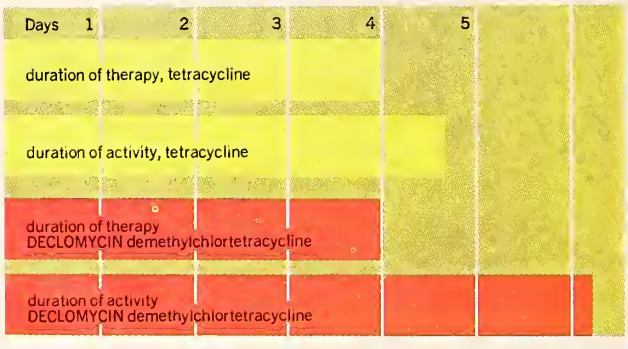
Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

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DEMETHYLCHLORTETRACYCLINE

produces 1-2 "extra" days' activity



1-2 "extra" days' activity
after the last dose to protect against relapse

one 300 mg tablet b.i.d.
or
one 150 mg capsule q.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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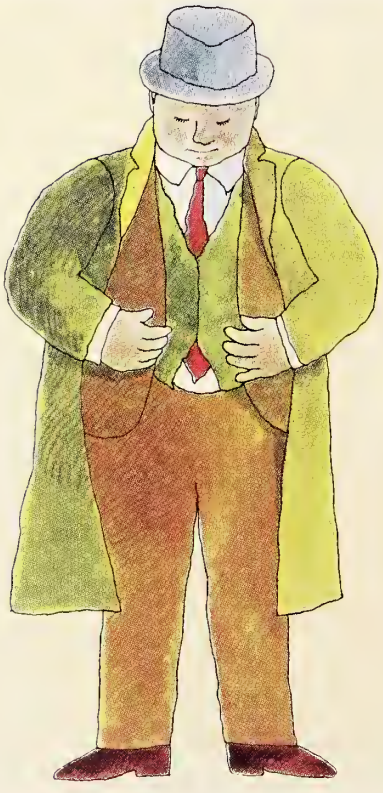
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DEXTRO-AMPHETAMINE SULFATE (15 mg.) WITH MEPROBAMATE (300 mg.) SUSTAINED RELEASE CAPSULES

to help establish a new dietary pattern

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculapapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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T wave changes and arrhythmias may occur as a result of intracerebral damage. Atropine administration may abolish these effects.

The Electrocardiographic Changes In Cerebrovascular Accidents

GARY ANDERSON, M.D.
*Indianapolis**

IN REVIEWING the recent literature, increasing numbers of case reports have called attention to the electrocardiographic changes occurring in cerebrovascular accidents and cranial trauma. These changes are both inconsistent and involve disturbances of rate and rhythm, as well as ST-T wave abnormalities. The purpose of this article is to present a case illustrating the magnitude of some of these changes as well as to review the pertinent literature.

Case Report

The patient, a 52-year-old female, was well until November 22, 1965 at which time she sustained a "seizure," and falling from a counter, struck her head on a stool. There was no previous history of neurological disorders. On admission to her local hospital she was in a semicomatose state. The blood pressure was 130/80, pulse 80 and the patient responded to pain. She responded poorly to spoken words. There was no evidence of localized paresis and a mild opisthotonus was present. Deep tendon reflexes were hyperactive, the pupils were moderately dilated and reacted to light. Lumbar puncture at that time was grossly bloody with an opening and closing pressure of 275 mm H_2O and 65 mm H_2O respectively. The subsequent day she was transferred to Indiana University Medical Center at which time her physical examination and lumbar puncture were essentially unchanged.

An electrocardiogram on admission (Figure 1) revealed a normal axis with sinus arrhythmia and bradycardia. The T waves were inverted in leads I, AVL and V1 through V6 and in lead V3, the T waves exceeded 30 mm depth. The Q-T interval was prolonged and there was a small pretransitional Q in V3. Carotid angiography revealed an aneurysm involving the right internal carotid at the origin of the posterior communicating artery. The course was progressively downhill and 19 hours after admission, respiration ceased.

At post-mortem examination the heart was found to weigh 320 grams. The valves were normal and coronary arteries were patent. There was no evidence of myocardial infarction. The brain was found to have bilateral subarachnoid hemorrhages covering the frontal lobes and cerebellar hemispheres. The cerebral and cerebellar arteries were patent. There was a 3 mm sac attached to a 4 mm cone sac on the right lateral aspect of the tuber cinereum. The apex of this cone was ruptured.

Discussion

The first reported case of atrial arrhythmia secondary to central nervous system (CNS) trauma was reported by Hay and Jones.[1] This was an atrial fibrillation observed to occur three times in a 35-year-old man without any heart disease and successfully converted to sinus rhythm with quinidine. Bramwell[2] reported a case of atrial fibrillation following head trauma, which was associated with nausea and vomiting but without neurological manifestations. This patient, also 35 years old, gave no history of cardiovascular disease and a 12 month follow-up subsequent to quinidine conversion showed no recurrence. Lucke[3] described a 59-year-old man, who after falling from a ladder and sustaining a concussion, developed atrial prematures with varying P-R intervals.

Hersch[4] studied 164 Bantu patients with head injury. Sinus arrhythmia was observed in 20% of these patients of which 7% demonstrated a wandering pacemaker within the SA node and 3% between the SA and AV nodes. However, when compared to a control group of 100 patients sustaining limb trauma, the incidence of wandering pacemaker was the same. When compared to a group of normal individuals, however, the incidence of atrial arrhythmias was distinctly higher. In the head trauma group 24% showed P wave height of 2.5 mm or more while of the limb trauma and normal group 14% and 2% respectively showed such changes. Doret and Forrero[5] showed similar P wave abnormalities, especially leads II and III, in patients suffering trauma to the head. This study also reported one case of supraventricular tachycardia.

While it appears that atrial arrhythmias are more common than those of

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Supported in part by the Herman C. Krannert Fund, U.S.P.H.S. Grants HE-6308, HTS-5363 and HE-5749 and the Indiana Heart Association.

Dr. Anderson is a resident in the Department of Medicine, Indiana University School of Medicine.

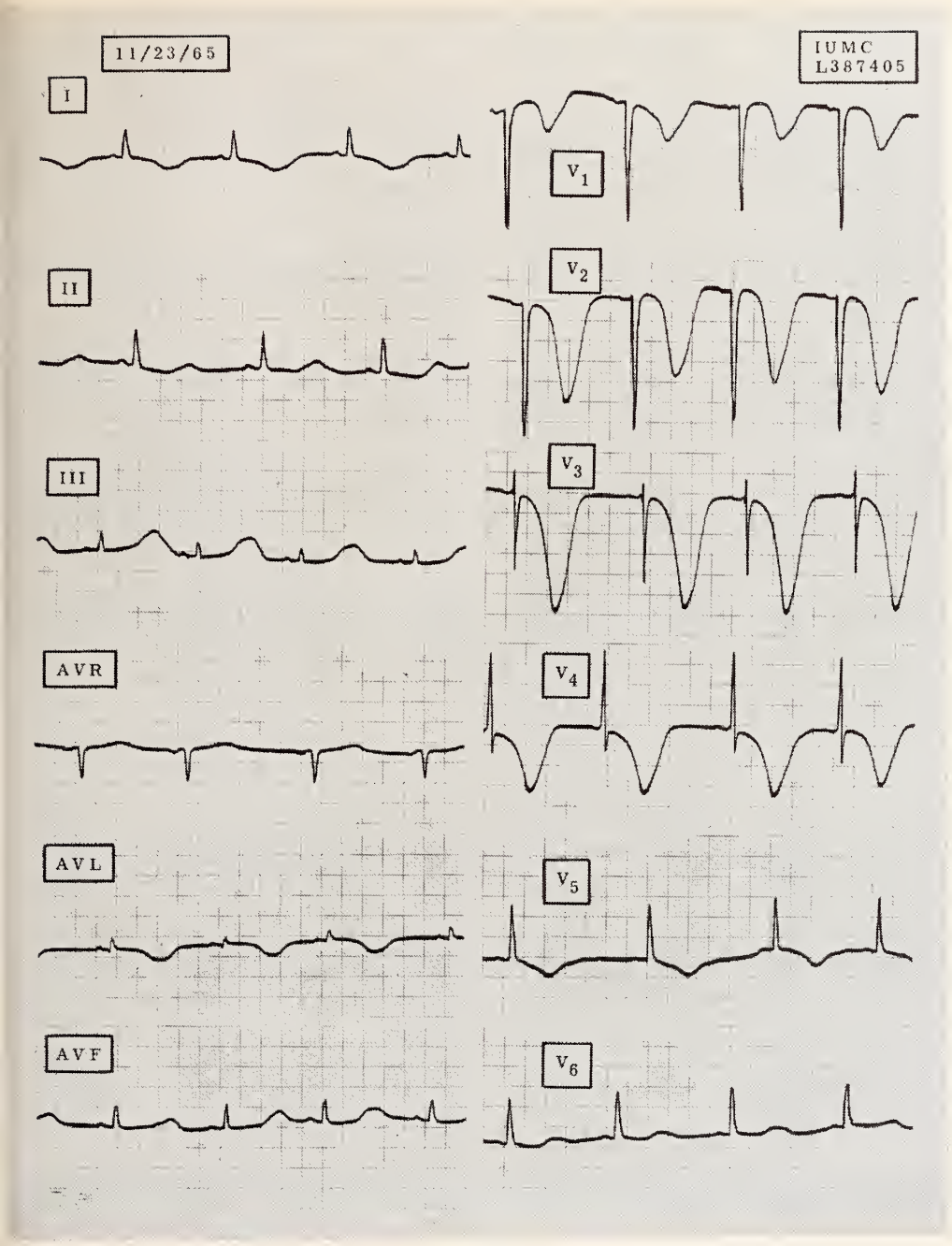


FIGURE 1

ELECTROCARDIOGRAM taken the day of admission showing deeply inverted T waves and sinus bradycardia.

ventricular origin, the latter has been observed by Nadis et al.[6] who reported a 5-year-old girl who, following a fall and transient unconsciousness, developed paroxysmal ventricular tachycardia which persisted for 14 months. Her physical examination was within normal limits except for the radiologic finding of a basilar skull fracture. Branch[7] also reported paroxysmal ventricular tachycardia in a patient with an internal hydrocephalus and an absence of cardiovascular disease.

The experimental studies dealing with induction of arrhythmias in animals by stimulation of the CNS or trauma have yielded variable results. Mauck et al.[8] implanted electrodes in the mesencephalic reticular formation in dogs. Stimulation with 60 cps current produced the typical anomalous atrioventricular excitation similar to the Wolff-Parkinson-White syndrome. While a bilateral section of the vagosympathetic trunks had no effect on the induction of the abnormal rhythm, interruption of the spinal cord at C-2 level protected against the arrhythmias. Stimulation of the distal cut end of the right vagosympathetic trunk, after induction of an abnormal rhythm, depressed the SA node and abolished the WPW-like pattern but only if the left vagal trunk remained intact.

Jacobson and Danufsky[9] studied the ECG sequelae of head trauma on 15 albino mice, six of which first received intraperitoneal atropine. Out of the nine non-atropinized animals, eight showed arrhythmias within 20 seconds following injury. These included nodal rhythm, sinus arrhythmia, incomplete AV block, dropped P waves, PVC's and sinus bradycardia or tachycardia. Of the atropinized group only one showed an arrhythmia, namely premature atrial contractions. T wave changes appeared in all of the mice without atropine within six seconds while in the atropinized group only one showed similar T wave changes. Autopsy findings in this group of animals included skull fractures, subdural or subarachnoid hemorrhage, and in a few, cortical lacerations. One had an intraventricular hemorrhage. The authors concluded from their study that the ECG changes were due to vagal discharge.

In the human, Poole,[10] stimulating the vagus nerve intracranially, observed only temporary bradycardias. Manipulation of the major basilar arteries and compressing parts of the circle of Willis resulted in aberrations of cardiac rate and/or rhythm in 9 of 22 cases reported. It is not unlikely that these arrhythmias are related to the nerve supply since the circle of Willis is thought to be innervated by cranial nerves V, IX and X. Levine[11] reported markedly and symmetrically inverted T waves in a 69-year-old woman who at autopsy showed a ruptured aneurysm of the circle of Willis.

Storm van Leeuwen[12] reported AV nodal and ventricular rhythm, shift of the SA pacemaker and multifocal premature systoles on stimulation of the brains of cats between the posterior corpora quadrigemina and the posterior portions of the cerebellum. Kar-

teweg et al.[13] reported the effects of subcortical stimulation in anesthetized cats and found that stimulation of the basal ganglia produced no effect while stimulation of the globus pallidus occasionally yielded a rise in blood pressure beats. Anterior hypothalamic stimulation produced a fall in blood pressure and bradycardia which was abolished by vagal section. The T wave remained unchanged.

Posterior hypothalamic stimulation produced a considerable rise in blood pressure without change in heart rate, multifocal ventricular premature beats, T wave changes, shift of the pacemaker both during stimulation and subsequent to the termination of the stimulus, PVC's, dissociation of conduction, pacemaker shift, T wave changes and tachycardia. It is of interest that the arrhythmias induced during stimulation of the posterior hypothalamus could not be abolished by vagal section while arrhythmias arising subsequent to stimulation were abolished by vagotomy. Posterior hypothalamic stimulation after section of the spinal cord at C-2 level failed to evoke the arrhythmia. The authors concluded that the effects of stimulation of the hypothalamus are mediated via tracts in the spinal cord, as well as the vagi. Beattie, Brow and Long[14] reported similar results with stimulation of posterior hypothalamic area.

Fulton[15] in an extensive review of the literature presented data suggesting that the orbital gyrus of area 13 contains the chief cortical representation of the vagus nerve. Ward and McCulloch[16] showed that strychninization of area 13 produced prompt activation of several hypothalamic nuclei which may in part be a basis for the production of the hemodynamic effects of electrical stimulation of area 13 (increased systolic blood pressure).

Changes in the QT and T wave in cerebrovascular disease, especially with subarachnoid hemorrhage have received considerable attention. Byer et al.[17] first noted wandering of the pacemaker with prolongation of the Q-T segment in a 47-year-old woman who suffered a cerebrovascular accident. Burch et al.,[18] in a series of 17 patients with CVA, reported prolongation of the Q-T from 7% to 66% with a mean of 29%. The T waves were deeply inverted and of the same general configuration as those seen in myocardial ischemia. Occasionally these were found to be positive in the pretransitional precordial leads. Large U waves were also encountered merging with the terminal T wave. Thus, the markedly prolonged Q-T intervals may indeed have represented Q-U intervals. Hersch[4,19] confirmed these observations and also suggested that U wave height greater than 1 mm correlated with the degree of stupor. While the T wave changes observed in CVA have been similar to those of subendocardial ischemia, Beard et al.[20] reported one case showing serial electrocardiograms suggesting evolutionary T wave changes suggestive of myocardial infarction but failed to demonstrate the QRS complex changes.

Cropp and Manning[21] in a series of 29 cases of subarachnoid hemorrhage observed one with a lesion of the right anterior cerebral artery in a close proximity to area 13. On the basis of this and other correlative studies, these authors suggested that the electrocardiographic changes may be related to vagal stimulation thus supporting the hypothesis of Fulton,[15] Ward and McCulloch.[16]

Summary

A case of cerebrovascular accident is presented demonstrating the severity of T wave changes which can occur. Such changes, which have been classically ascribed as secondary to myocardial ischemia, are found in various forms of intracerebral damage. The T wave changes and arrhythmias, namely, wandering atrial pacemaker, blocked atrial premature systoles, PVC's, atrial fibrillation and even ventricular tachycardia, as well as sinus bradycardia, are felt to be mediated via both spinal cord tracts and the vagi. Abolition of both T wave changes and arrhythmias was shown to occur with atropine administration.

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Potassium given orally may demonstrate the "functional" character of an inverted "T" wave.

"Functional" T Wave Changes

ROBERT M. KING, A.B.
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*Indianapolis**

SYMMETRICAL inversion of the T waves in the conventional electrocardiogram is frequently due to myocardial ischemia. On occasions, however, these may be "functional" in origin and do present a differential diagnostic problem. Wassenburger[1] and co-workers pointed out that potassium (K+) alters the polarity of such "functional" T waves but as a rule has no effect on the polarity of "organic" T waves.

The purpose of this article is to present an instance of marked T wave abnormality which, by its response to K+, was demonstrated to be "functional" in origin.

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Supported in part by the Herman C. Krannert Fund, U.S.P.H.S. Grants HE-6308, HTS-5363 and HE-5749 and the Indiana Heart Association.

Mr. King is a senior medical student at the Indiana University School of Medicine and a student research Fellow in Cardiology.

Dr. Schuster is a resident in the Department of Medicine, Indiana University School of Medicine.

Case Report

The patient, a 48-year-old female, was admitted to the Robert Long Hospital on 11-16-66 with the chief complaint of vague abdominal pain. She had undergone a subtotal gastrectomy in 1962 for a gastric ulcer and had been seen in 1965 because of abdominal pain. At that time the patient was felt to have the post-gastrectomy syndrome. The patient denied any symptoms which would suggest heart disease.

Physical examination during the present admission was within normal limits with the exception of mild hypogastric tenderness on deep palpation. Barium swallow and enema, I-V cholecystogram and IVP studies were interpreted as normal. Hemogram and urinalysis were within normal limits. The stools were hematest negative.

A routine admitting EKG on 11-16-66 revealed non-specific ST-T wave changes (Figure 1). Electrolytes drawn that morning showed a serum potassium of 3.7 mEq/L. A repeat on 11-17-66 (control) revealed depressed ST segments. One hour after the patient was given 100 grams of glucose orally, the EKG (post-glucose) revealed the ST segment to be more deeply depressed with complete inversion of the T waves. The serum K+ at this time was 3.0 mEq/L as compared to a level of 3.6 mEq/L during the control tracing. At this point the patient was given 45 mEq of potassium orally and a tracing taken 45 minutes later (post-K) revealed the ST segments and T waves to be of normal contour. Serum K+ drawn at the time of the last tracing was 4.6 mEq/L. On the basis of these changes it was felt that the T waves were functional in origin, or at least did not reflect organic disease.

The patient was discharged on 11-29-66 with the diagnosis of post-gastrectomy syndrome.

Discussion

The effect of changing levels of potassium on the contour of the ventricular monophasic action potential (MAP) has been a well documented

observation since the advent of the micro-electrode technic and has been the subject of recent review.[2] Increased K+ enhances repolarization in the isolated ventricular cell, i.e., decreases the duration of the MAP. On the other hand, low K+ shows the opposite effect on the MAP. Correlating these changes with the conventional electrocardiogram, hyperkalemia is known to cause the T waves to become "tall and peaked" while hypokalemia often produces depression of the ST segment and flattening (or inversion) of the T waves.

In a large series of patients, Wassenburger[1] found that all functionally inverted T waves reverted to normal following potassium administration. In contrast, he showed that organic T wave changes due to myocardial infarction and ischemia, left bundle branch block, and left ventricular strain, with few exceptions, failed to normalize following K+ ingestion. On the basis of these observations, he concluded that ST-T wave changes which reverted to normal following K+ ingestion should be classified as functional changes and not due to organic heart disease.

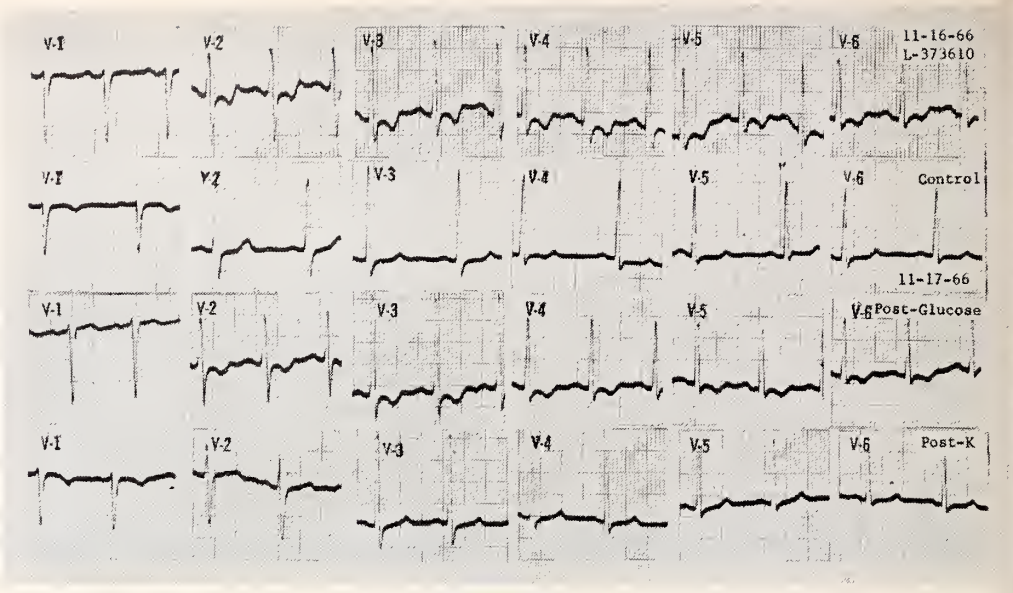


FIGURE 1

TRACING on 11-16-66 depicts non-specific ST-T changes. On 11-17-66 the control tracing disclosed upright T waves which became inverted following administration of glucose and reverted to normal after K+ was given.

In our patient, we observed a striking correlation between the ST-T wave changes and the serum potassium levels, thereby furnishing positive evidence of the functional nature of these ST-T wave changes.

Summary

An instance demonstrating the use of K+ in the diagnosis of "functional" T waves is reported.

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*Nursing Homes and Title VI**

"Nursing homes that receive funds through federally aided programs such as Medicare or state welfare programs are covered by Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, or national origin in any program receiving federal financial assistance."

A nursing home, to be qualified to care for patients under plans receiving federal aid, must make reports on lack of discriminatory policies to the Public Health Service, and if doubt arises as to the acceptability of policies, each home must take positive action to correct unsuitable policies before being accepted as a facility for care of covered patients.

Each home must notify the public, its patients and its sources of referral that its services are available on a nondiscriminatory basis. The home will not be accepted if it fails to comply with this widespread notification stipulation. If this does not result in the admission of minority group patients, an on-site review will be conducted to determine the reason.

Minority groups in particular, all civic and private organizations, hospitals and social agencies must be notified. A copy of the written policy should be displayed in the nursing home. The Public Health Service has developed a model policy statement for this purpose.

The patients in each nursing home need not conform in proportional numbers with the proportion of each minority group in the general population. but if a home's sources of referral do not provide or refer patients who belong to minority groups, the administrator of the home is expected to seek out such referrals.

In the absence of such active solicitation of patients from minority groups, the home is to be considered in violation of the law.

It is not necessary that each Negro patient be placed in a room with a white patient, but in the absence of this condition, the burden is upon the nursing home to prove that the rooming arrangements are based on other considerations.

A physician may request that a patient not be roomed with a patient of another race, but must quote valid medical reasons therefor. It is to be recognized also, that prejudice on the part of a patient may be so pronounced as to compromise the patient's medical condition, but this circumstance, as a reason for separating patients of various races, is not accepted for more than an occasional case.

Members of the field staff of the Office of Equal Health Opportunity will visit nursing homes to investigate questionable practices and to respond to complaints from minority groups.

Inspection visits will be made after prior notification except in the case of homes that are under suspicion. Inspectors will also visit sources of referral and representatives of minority groups.

"If the nursing home participates in federally aided programs, it must be willing to serve all patients in the community without regard to race, color, or national origin."

* A resume of information contained in a booklet under this title—a compendium of questions and answers on the subject published by the Office of Equal Health Opportunity of the U. S. Public Health Service.

Guest Editorial

Hippocrates Dropped In

Hippocrates dropped in the office yesterday afternoon. It was late in the day, and I had just finished seeing my last patient on the schedule. I was sitting there, reading a copy of *Medical World News* — or was it *Medical Economics?* At any rate, this bearded man in a flowing robe stuck his head around the corner of the office and said, "Greetings, colleague. What's

new?" I recovered quickly enough to answer, "I am honored, hoary father of medicine. Here, take a load off your feet." as I quickly proffered a chair to my visitor. "What's new?" he repeated.

"Oh, new? Well, Rondomycin, Ecotrin, Indocin and Lasix are new," I replied. "But, of course, some might say that they aren't all *that* new; and, of course, the side effects and toxic manifestations aren't particularly new, I suppose," I added.

"Have they done away with human suffering, disease and infirmity?" he asked, suddenly switching to English. This pleased me, because my college Greek would be failing me quite soon. The question did not please me nearly as much.

"Well, no, they don't do away with these things completely, but we are making tremendous strides in medical research every day, so I'm told. For example, the yearly expenditures of the National Institutes of . . . ."

"Let me ask you, colleague," he interrupted, "what progress the physicians as a group are making?"

"I'm glad you asked," I replied. I was glad, too, because for a minute there, I thought he might not be convinced about my former answer. "Why, we just finished a successful American Medical Association meeting in Las Vegas, at which there were great debates about whether we should agree to accept small payments from the government directly for taking care of old, sick people. There was also important discussion as to how we should train medical students to turn out more family practitioners, instead of so many specialists. Furthermore. . . ."

"I see," he cut in again. "I believe I am getting a clear picture of what is going on. May I ask one more question of you, colleague? You were reading a learned journal when I dropped in. May I inquire as to the nature of your investigation?"

"Well, as a matter of fact, I was puzzling over two problems, Hippocrates. I was wondering if it would be wiser for me to lease my next car. You see this might have considerable tax savings in it for me. My other problem concerns just how much of my income I can put into the retirement fund that we have set up here in the office. The articles that I was reading have very wise advice for the practitioner regarding these knotty problems. I don't suppose you had these problems; but if you have a minute, I'd like to fill you in with some background data to get some feedback from you on them. For example. . . ."

"I must leave now, colleague. Thank you for enlightening me" he said, reverting to Greek, and out he went, very slowly and quietly, tipping his staff to me as he passed.

That was the entire visit. I was, of course, pleased that he came by, and I hope that I was of help to him. Perhaps he will return. He should feel free to, because, after all, I didn't charge him because I'm rather old-fashioned, and so I put it down to professional courtesy.—J.W.H.

Editorial Notes...

Nursing homes are especially difficult to evacuate when on fire, and should have the most efficient means of controlling fires. There have been 48 nursing home fires in the United States in the past 15 years with the average loss of almost 10 lives per fire. The National Fire Protection Association recommends automatic sprinklers for nursing homes. Such systems have a near-perfect record of extinguishing or controlling fires and cost about 50 cents per square foot of floor space for installation.

The whirlpool bath which is a standard and very effective part of the equipment of every rehabilitation and physical medicine facility is now available in several sizes and models for installation as luxury equipment with therapeutic benefit in homes, apartments, clubs and public institutions. Hydro-Pools (Jacuzzi) are made of fiberglass in sizes from 4 x 7 up to 10 x 10 feet.

One of the Metropolitan Life 1966 Awards for Research in Accident Prevention went to Dr. Donald F. Huelke of the University of Michigan. Dr. Huelke and his associate Paul W. Gikas did an on-the-scene investigation of 104 fatal auto accidents. There were 136 fatalities. Huelke found that 40% of the victims would have been saved if they had worn a seat belt, and that an additional 10% would have been saved by a seat belt-shoulder harness combination.

The number of births continues to decline. The all-time high was 4,334,000 in 1957. There were 3,759,000 births in 1965 and about 3,600,000 in 1966. The decline in the past five years is due to smaller families. The birth rate as calculated in number of births per 1,000 married women has not declined for first borns since 1960, but the rates for subsequent births have all declined considerably.

The Atomic Energy Commission is soliciting proposals from industry to design, build and operate, with government help, a pilot plant for processing meat by irradiation. The plan is to process at least one million pounds of meat per year. Radiation processed bacon, white potatoes and wheat and wheat flour have received FDA approval for public consumption. The Army is now using limited quantities of radiation preserved bacon and potatoes. FDA clearance for ham is expected soon, clearance for pork is to be decided sometime in 1967, and the O.K. on chicken, beef, shrimp and pork sausage is scheduled in 1968, all well before the proposed plant is expected to be in operation. ◄


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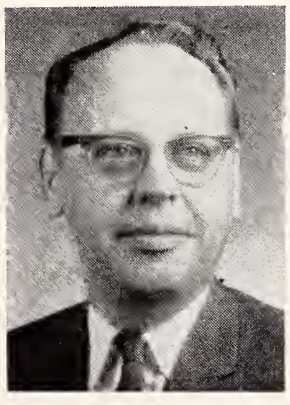
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President's Page

Dear Doctor:

It is indeed a great privilege and pleasure to be able to announce to you through this letter that our headquarters building is completely paid for. The burning of the mortgage note occurred January 22, 1967. I believe that in announcing this one must give credit to Dr. Ralph Everly for his devoted interest and for the many hours and many difficulties he has had on the Building Committee. It is my personal knowledge that Ralph has continued to look after the building as if it were his own home. Let us all give thanks to those officers and men who had enough foresight to see that we needed the building and also a method by which it may be paid off at this early date.



By the time this *Journal* is printed, the legislature may have adjourned. I would hope that our efforts in the legislature have not gone for nought. Whether or not Title XIX was implemented is of some question at this writing. However, we will have done our best to guide our legislature for the best interests of patient care in Indiana.

I recently attended a meeting on Regional Medical Programs, January 15-17 at Washington, D. C. It became increasingly obvious to me that we can no longer stick our head in the sand and let someone else worry about regional planning. If we do not get into regional planning, it will be done for us. It is distasteful. It is not a program for which we are wholeheartedly in favor. However, again we must stay within the framework of this planning or have it done for us by someone else.

I sincerely hope you remembered to send a valentine to your auxiliary member this month.

Eugene S. Kiefer M.D.

The Woman's Auxiliary

REPORTS TO ISMA

One of the most inspiring and promising aspects of our auxiliary program is to observe the growth and enthusiasm of "our child," WA-SAMA (Woman's Auxiliary to the Student American Medical Association). In 1957 a handful of members of WA-AMA (Woman's Auxiliary to the AMA) along with a few student wives and the staff of SAMA (Student AMA) formed WA-SAMA, open for membership to all student, intern and resident wives.



It was established with a two-fold purpose:

(1) To prepare members for their future role as wives of doctors in the community where they eventually will live,

(2) To bring our wives and their families together with other medical families and medical groups for their mutual benefit.

The idea of WA-SAMA was very well received; today there are over 5,000 members in over 60 chapters. The national organization is divided geographically into seven regions. Our own, Region 4, comprises 11 chapters: University of Cincinnati, Indiana University, University of Kentucky, University of Louisville, University of Michigan, Oakwood I & R (Intern & Resident), Ohio State University, Pittsburgh I & R, University of Pittsburgh, Wayne University and Pontiac I & R.

Meetings are held on national, regional and chapter levels. The national publication (six copies per year) is "The Chatterbox"; Region 4 communicates monthly through "The Link," while our own Indiana University chapter prepares a monthly publication, "Girls Pearls."

A new project of our I.U. chapter this year is a "loan closet." WA-SAMA members may rent up to three pieces of household equipment from the pool for a small charge. Prices range from 25¢ for a set of dishes to $5.00 for a sofa in excellent condition. The furniture and other items, furnished by doctors' families and medical students, may be kept until graduation. Meanwhile they may be painted, refinished or improved in any manner. The project, located in the Bowers Building at the Medical Center, is proving very successful. Should you have any items to contribute please contact our Auxiliary Liaison Officer, Mrs. Herbert L. Egbert, 419 West 63rd St., Indianapolis 46260.

Mazo D. Scales

Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

Folic Acid Deficiency in Poverty and Old Age

Seventy-two aged patients were studied by the staff of St. Thomas' Hospital Medical School to determine possible folic acid deficiency in these subjects.[1] Determinations of serum folate were made, and it was found that 28 patients had low levels. Two patients were found with frank anemia that further study showed to be of folic acid deficiency type. All indirect evidence points to the low serum folate levels to have been caused by dietary inadequacy. The authors make valid points, however, that this is extremely difficult to document since accurate dietary histories are next to impossible to obtain. This was especially so with this group of patients, since many were addled and had difficulty remembering anything that they ate in the past 24 hours. It is also pointed out that published nutritional tables are probably in error, not only as to the amount of folic acid present in a given food, but also none of them take into account any degree of destruction of folic acid by cooking. Although this work is not startling in itself, it should help to alert the practitioner to the possibility of folic acid deficiency anemia in patients in this age range, particularly if socio-economic conditions are such that the patient may have an inadequate dietary intake.

Parrot Fever a People-to-People Disease?

An outbreak of psittacosis in Cambridge, England, in 1964 is reviewed briefly by Barrett and Greenberg.[2] Twenty-nine patients suffering from ornithosis were seen in one clinic at that time, and the authors speculate that many other people were involved, but were not directly under their care. This may rank as one of the largest psittacosis outbreaks since the infecting agent was identified in 1930. The diagnoses were confirmed by serologic methods in the present paper. All patients did well, and responded to tetracycline therapy. In only half of the cases had there been any known contact with birds, and in only six cases was an avian source of infection proved. The patients' white blood cell counts and differential counts were normal. The ESR was invariably elevated. Five patients developed the unusual manifestation of erythema nodosum. The other important finding in this report is that human-to-human transmission of the disease may have occurred in two cases, but full documentation of this is lacking.

True Obesity Means High Serum Lipids—and Vice Versa

If future reports support the work of Rifkind and Begg,[3] we may be able to estimate serum lipid levels by a simple bathroom scales. These authors measured total serum lipids, cholesterol, triglycerides, and beta-lipoproteins in over 400 male subjects. A high correlation was found between these measurements and body weight. The correlation was not perfect, however, and this may just be a deficiency in our ability to measure true obesity, since it is true that obesity itself is difficult to determine. If we can improve this measurement by correlating percentage of adipose tissue to whole body mass, the significance of these data may be increased. The authors make passing comment on the, they believe, real association between high serum lipids and coronary artery disease and peripheral vascular disease.

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*Brest, A. N., et al.: J. New Drugs 5:329, 1965.

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On the Profession of Medicine*

GLENN W. GEELHOED, A.B.
Ann Arbor, Mich.†

WHAT does it mean to follow a profession? Medicine is widely called a profession, yet the term profession connotes several different meanings. It would be interesting to note what meanings the term has and in what senses they are applied to medicine. I should like to analyze and describe four uses of the term profession and examine implications the applicable meanings have for the ethics of the medical profession.

First of all, the term profession can mean the following of an occupation as a means of livelihood or for gain. In this sense a profession is simply a means for making a living. Uses of the term in this sense are common, as in a professional pugilist, or a professional driver who makes a living by driving a truck. That there is nothing innately noble about the term profession when so used is seen in its use to describe criminals, such as a professional safe-cracker. Another example can be noted in its application to certain women who are said to practice the "world's oldest profession."

The word professional can also imply a certain expert mastery or competence in almost any field. There it is used as the opposite of "amateur." The popular advertising motto "the best is always pro" is an illustration of the term in this sense. A combination of special abilities is implicit in this sense of the word and standards of behavior and achievement are concomitant features. Several professions by the first criterion of the term "means for making a living" have acquired a subspecialized meaning in the second sense of the term by superimposing the adjective "learned." The "learned" professions have an inherent set of requirements that place them beyond the practice of anyone who might wish to make a living by them. There is also a recognized method for achieving the skills or knowledge that set professions apart from other occupations. No qualitative difference has separated the second sense from the first, but merely a quantitative level of know-how.

A third sense in which the term profession is used involves following as a business an occupation ordinarily engaged in as a pastime, or making a business of an office not properly to be regarded as a business. Examples of the former would be golf, ski, chess, or tennis pros; an example of the latter would be a "professional politician." In the former case there is a note of dilettantism, a "playing at" an occupation as though it were a hobby in which one had acquired sufficient proficiency to warrant payment. The latter case evinces a betrayal of a trust, a taking advantage of a responsibility to one's own profit.

And last, there is the sense of the term profession that means a calling, an avowal or declaration that one "stands for something." The "professor" is a defender of principles to which he adheres. The term profession is used in religion to refer to that outward declaration of a faith in doctrine and ideals, using the term in this same sense.

An Item of Exchange

Of these four meanings, which applies to the profession of medicine? Since almost all physicians depend upon the practice of their art for their livelihood, medicine is a profession in the first sense. As in the other crafts and trades included in the first sense, the physician makes a living by offering his commodity of medical service as an item of exchange. Unlike the majority of the crafts which are its fellows under the first criterion, medicine is a profession that commands more than a living; it has a high return value that is often the first thing that strikes the eye of the young aspirant. The respect and reward that are given to the doctor as artisan (cf. *der Arzt*) may be due to the demand and value of his commodity as estimated by the consumer, or it may follow additionally from the higher requirement levels seen under the second sense of the term profession.

By the second criterion, medicine is indeed a learned profession, and one that requires a specialized expertness of no mean achievement. This refinement of the profession is but a quantitative step above the first level; however, the division is not a qualitative one but merely a measure of cleverness. A technician can function at whatever level he seeks, since there is no morality that necessarily advances with the sophistication of technology. There are technicians (who are professional in both first and second senses) in medicine who wash glassware, technicians who draw blood, and some who remove appendices, all within the same spectrum of measured skill.

The third sense of the term profession enters into the consideration of those who consider a profession "the gentlemanly thing to do." A profession in this third sense is what one follows to avoid doing manual labor, and offers the dilettante a respectable perch from which to view the world and select items for smattering. A popular version of this among young physicians is medical gamesmanship. More despicable than those who play at medicine are those who play it for their own advantage and enjoy the peculiar type of power with which physicians are entrusted.

It is only when we reach the fourth and last sense of the term profession that we face what it is that medicine stands for. A hard look at the practice of medicine while standing upon this highest rung of the ladder in the definition of their profession may convince

* First place winner in the 1966 Norman A. Welch, M.D., Medical Ethics Essay Contest sponsored by the Judicial Council of the AMA.

† Medical student, University of Michigan.

many physicians that they do not have a profession in this final sense, for in medicine what is to profess? If medicine be a calling, to what are we called? For the ethical standards and goals medicine professes, some knowledge of the historical heritage that has contributed to the profession in this peculiar sense is necessary.

The Genuine Physician

One of the earliest and still most articulate examination of the qualities that constitute the true profession of medicine is found in a Socratic dialogue in Plato's *The Republic*. Thrasymachus is inquiring into reasons why it is that men work. He has just decided that all men, including the ruler in even the ideal state, would be motivated only by self-interest in the power that would accrue to the person in the profession and in the living he would make. Socrates stops him short:

> "Enough of this banter . . . . Tell me this: Is the physician of whom you spoke as being strictly a physician, a maker of money, or a healer of the sick? Take care you speak of the *genuine* physician."
>
> "A healer of the sick," replied Thrasymachus.

But, Socrates now asks, aren't you neglecting the fact that each of the individuals who practices medicine has a primary interest in making a living, as in the first sense of the term profession?

> "Has not each of these persons an interest of his own?"
>
> "Certainly."
>
> "And is it not the proper end of their art to seek and procure what is for the interest of each of them?"
>
> "It is."

Through further questions, Socrates develops an alternative thesis that the goal of medicine is in the practice of it; that the refinement and expertness of the art is the goal to be pursued and enjoyed as an end in itself. Taking pleasure in the expertness of medical practice would qualify it as a profession in the second sense of the term. Or *ars gratia artium* might be the self-sustaining energy loop that would justify medicine's definition as a profession to the casual practitioner who is seeking a profession in the third sense.

> "Have the arts severally any other interest to pursue than their own highest perfection?"
>
> "What does your question mean?"
>
> "Why, if you were to ask me whether it is sufficient for a man's body to be a body, or whether it stands in need of something additional, I should say, certainly it does. To this fact the discovery of the healing art is due, because the body is defective, and it is not enough for it to be a body. Therefore, the art of healing has been put in requisition to procure what the interests of the body require. Should I be right, think you, in so expressing myself, or not?"
>
> "You would be right."
>
> "Well then, is the art of healing itself defective, or does any art whatever require a certain additional virtue; as eyes require sight, and ears hearing, so that these organs need a certain art which shall investigate and provide what is conducive to these ends: is there, I ask, any defectiveness in an art as such, so that every art should require another art to consider its interests, and this other provisional art a third, with a similar function, and so on without limit? Or will it investigate its own interest?" . . . .
>
> "Apparently it is so," he replied.
>
> "Then the art of healing does not consider the interest of the art of healing, but the interest of the body."
>
> "Yes."

Since it appears that our limitation of the profession of medicine to any of the first three senses of the term is no longer tenable, for what good does medicine stand?

> "Well, but you will grant, Thrasymachus, that an art governs and is stronger than that of which it is the art."
>
> Thrasymachus assented with great reluctance to this proposition.
>
> "Then no science investigates or enjoins the interest of the stronger, but the interest of the weaker, its subject."
>
> To this also he at last assented, though he attempted to show fight about it.
>
> "Then is it not also true, that no physician, insofar as he is a physician, considers or enjoins what is for the physician's interest, but that all seek the good of their patients? For we have agreed that a physician strictly so called, is a ruler of bodies, and not a maker of money; have we not?"
>
> Thrasymachus agreed that we had.

Socrates concludes with the ethical principle that has dominated the subsequent tradition of medicine. We distinguish man *qua* wage-earner from man *qua* professor of medicine. Only in the fourth sense of the term does medicine rise to a truly noble profession. And what is the good that medicine professes? The good of its objects which are other than they who practice the art and which is external to the art itself. And what are the objects of medicine's service? The patients, the society, in a word — man.

> "And thus, Thrasymachus, all who are in any place of command, insofar as they are rulers, neither consider nor enjoin their own interest, but that of the subjects for whom they exercise their craft: and in all that they do or say, they act with an exclusive view to *them*, and to what is good and proper for *them*." ◄

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(One of a series prepared by Blue Shield)

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Blue Shield's role in Medicare began shortly after the original legislation was signed in July, 1965. At that time, the National Association of Blue Shield Plans sought the guidance of the American Medical Association as to what its role should be. The AMA encouraged Blue Shield "to assume an important role in the administration of the medical-surgical portion."

Blue Shield then had to decide how to use its vast experience in the private financing of medical care in the best interest of the program, the medical profession and the patient. It decided that its major responsibility should be to help implement Medicare in a way that would make best use of the voluntary sector.

While the final regulations were being drafted, Blue Shield representatives met repeatedly with Social Security Administration officials to discuss how the new program should be put into operation.

There's little doubt but that Medicare is having a tremendous impact on medical practice. It is having a tremendous effect on Blue Shield, too—presenting many new and complex problems.

For one thing, the administration of Medicare is far different from Blue Shield's standard operation, and the expertise of Blue Shield personnel could not be immediately applicable.

Also, because this massive and multifaceted program was implemented in a relatively brief period of time, many new regulations and directives became necessary as new problems were exposed.

Thus, the carriers have been subjected to new rules, rule changes, and directives which have not always been consistent. Although this situation may be an understandable one, it has not made the job of the carriers any easier.

However, Blue Shield is confident that with the mutual cooperation that has always existed with the medical profession, the administration of the Medicare program will function more smoothly. ◄

W. C. Huddlestone
Communications Division

winter 1966

DORSEY Season

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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts



"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.[1]

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.[2]

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.[3] The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.[4] The cilia then sweep the particulate matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.[5]

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.[6] The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.[7] The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.[8]

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.[9] In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.[10] The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.[11] The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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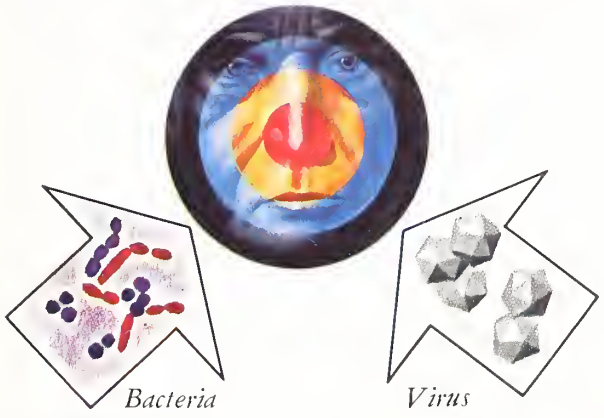
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cipitate an attack of rhinorrhea in hay fever sufferers.[12] Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.

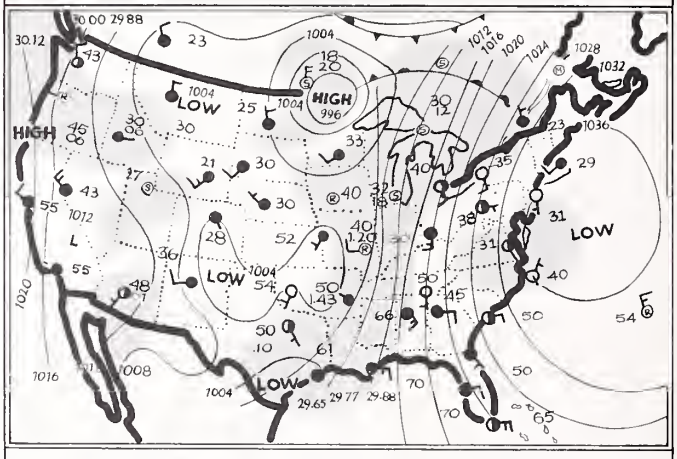


The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.[13] This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections,antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases, symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

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Report on Actions of the House of Delegates American Medical Association

20th Clinical Convention
November 27-30, 1966
Las Vegas, Nevada

LAS VEGAS, NEV.—All five of the ISMA resolutions presented at the AMA's 20th Clinical Convention here Nov. 27-30, 1966, were adopted in their original or modified form by the AMA House of Delegates.

Indiana was successful in obtaining the concurrence of the House to instruct the AMA to work for the deletion of the requirement of assignments under both Title XVIII and XIX of the Social Security law. Also the resolution calling for the patient to obtain reimbursement on the physician's statement rather than a paid receipt was adopted in the following language:

"Resolved, That the AMA immediately seek remedial action to amend PL 89-97, Part B, Title XVIII, by deleting the word "receipted" from Section 1842 (b) (3) (B) (ii), and substituting 'such payment will be made on the basis of a method of payment so arranged to preserve and continue the profession's current practice of billing.' "

Indiana's resolution on usual and customary evoked a lot of discussion as it was intended and was helpful in obtaining the House consent not to adopt the Report of the Council on Medical Service but to adopt the definition as reported above.

The House concurred with the ISMA in recommending that their representative on the Joint Commission express alarm over the JCAH approving hospitals whose laboratories were under the direction of other than a qualified physician.

The House also concurred in ISMA objections to the requirement for certification and recertification. The House resolved "That the American Medical Association advise the Department of Health, Education and Welfare that the present requirements for certification and recertification have proven highly objectionable, unnecessary, and do not contribute to the quality of medical care,

"Be it further resolved that the American Medical Association endeavor to bring about repeal of those portions of PL 89-97 in which the requirement for physician certification of medical necessity appears," etc.

The House established a definition of "usual," "customary," and "reasonable" fees as they apply to the physician practice. The action as adopted is as follows:

"Whereas, Last June the House of Delegates of the American Medical Association sensed the everlasting importance of clear, well-understood definitions of the words 'usual,' 'customary' and 'reasonable'; and

"Whereas, Report 'H' of the Council on Medical Service pertaining to these definitions was referred back to the Council for further study and report to the House of Delegates at the 1966 Clinical Convention; and

"Whereas, The definitions proposed in the most recent report of the Council on Medical Service remain inadequate insofar as protecting the individuality of physicians involved in various public and private third party financing mechanisms in the several states; and

"Whereas, It is clear that in spite of extensive study it is literally impossible to arrive at definitions of these words acceptable for application in all of the states; therefore be it

"Resolved, That the definitions of the words 'usual,' 'customary' and 'reasonable' be considered, within the fundamental framework of individual determination, the responsibility of the constituent state medical societies, with the understanding that the advice and counsel of the AMA be made available to those states requesting such assistance; and be it further

"Resolved, That in view of the foregoing, the report of the Council on Medical Service on this subject not be adopted."

In explanation, the report stated:

"On a number of occasions, the House of Delegates has expressed its preference that programs for financing physicians' services be based upon the concept of 'usual and customary' charges for professional services. Confusion exists because the words 'usual,' 'customary' and 'prevailing' are used in different ways by physicians, by government and other agencies. Physicians have long used the word 'usual' in relation to charges made by an individual physician. In public law 89-97 such charges are referred to as 'customary.' Physicians in some areas have used the word 'customary' in relation to a full range of charges for the same professional services made by doctors in a geographic area. In other areas 'usual' and 'customary' are considered synonymous. In PL 89-97 such a full range of charges is designated as 'prevailing,' and this term is recognized as one which will continue to have an application in that program's administration.' "

Indiana's delegation to the meeting was composed of Drs. Guy A. Owsley, Hartford City; Jack E. Shields, Brownstown; Maurice E. Glock, Fort Wayne; Dwight W. Schuster, Indianapolis; Harold C. Ochsner, Indianapolis; Eugene F. Senseny, Fort

Wayne; Frank H. Green, Rushville; James H. Gosman, Indianapolis; Robert M. Brown, Marion and Kenneth O. Neumann, Lafayette.

Also attending from Indiana were members of the ISMA Executive Committee: Drs. Ralph V. Everly, Indianapolis; Burton E. Kintner, Elkhart; Eugene S. Rifner, Van Buren; G. O. Larson, LaPorte and Lowell H. Steen, Whiting; James A. Waggener, executive secretary; Kenneth W. Bush, administrative assistant; Dr. Lall G. Montgomery, Muncie, member of the AMA Section on Pathology and Dr. Lester D. Bibler, Indianapolis, AMA trustee.

Education for family practice, billing and certification procedures under Public Law 89-97, proposed revisions of the Selective Service System, payments for professional services, compensation for house officers, and use of the terms "ethical" and "unethical" were among the other major subjects acted upon by the House.

Dr. Charles L. Hudson, AMA president, told the Monday opening session of the House that the need to improve existing services and establish new services for the total population should be a "top priority" of the medical profession. He proposed that the AMA and the state and county medical societies launch a continuing program, under predominantly private auspices, for all persons of whatever age, race, creed or color, and he emphasized that it is "among the needy and formerly indigent that I feel we must show interest, initiative and enterprise."

At the Wednesday session Dr. Robert Mayo Tenery of Waxahachie, Texas, general surgeon and past president of the Texas Medical Association, was elected to fill the unexpired term of the late Dr. William A. Hyland, ending June, 1969, on the Council on Constitution and Bylaws.

Final registration reached a grand total of 11,226, which was a record high for an AMA Clinical Convention, and that included 4,574 physicians, which was the third highest physician registration at a clinical convention.

Education for Family Practice

Calling it "a document of major importance on a subject of vital significance to the health care of the American public," the House of Delegates endorsed the recommendations of the Ad Hoc Committee on Education for Family Practice and authorized the Council on Medical Education to develop and initiate plans for their implementation. The long report contained the following recommendations:

"A. Major efforts should be instituted promptly to encourage the development of new programs for the education of large numbers of family physicians for the future, as described in the body of this report. The educational programs should relate to all levels of medical education, including pre-medical preparation, medical school education, internship and residency training and continuing medical education. Keynotes should be excellence comparable to programs in other specialties and flexibility to permit the design of programs which will meet the needs and interests of individual physicians.

"B. Medical schools and teaching hospitals should be urged to explore the possibility of developing models of family practice, in cooperation with the practicing profession.

"C. New sources of financial assistance should be developed for the support of family practice teaching programs. Substantial funds should be made available for all aspects of the programs, including the conduct of the educational program, the recruitment and training of full-time faculty, the development of facilities and models of family practice and the conduct of research in patient care and community medicine.

"D. Recognition and status equivalent to other medical specialties should be given to family practice. An appropriate system of specialty certification should be provided for those who have completed approved educational programs and have demonstrated their competence as family physicians. The graduate program (i.e., internship-residency program) should be an integrated whole, evaluated for accreditation by one body rather than two.

"E. Careful attention should be given to other factors which should make the environment for family practice more favorable and serve as incentives to medical students and young physicians to enter this field.

"F. Careful study should be made of the effect of pre-medical programs and the admission procedures, curricula and student evaluation policies of medical schools upon the production of family physicians."

Delegates and other interested AMA members also attended an open hearing Tuesday morning on the report of the Citizens Commission on Graduate Medical Education, which is similar in many respects to the report of the Ad Hoc Committee on Education for Family Practice. The commission report is still under study by the AMA Board of Trustees and Council on Medical Education. The House of Delegates urged every physician and medical society to study the report (commonly called the "Millis Report"), to evaluate it and to present comments and critique to the board prior to the next session of the House.

Public Law 89-97

The House adopted a resolution urging that the American Medical Association advise the Department of Health, Education, and Welfare that the present requirements for certification and recertification have proven highly objectionable, unnecessary, and do not contribute to the quality of medical care.

It also recommended that the American Medical Association endeavor to bring about repeal of those portions of PL 89-97 in which the requirement for physician certification of medical necessity appears.

The resolution concluded by suggesting that the fiscal intermediaries and the American Hospital Association be advised that AMA will be available to assist in the development of appropriate amendments to this legislation. The purpose of this consultation would be to discuss the complexities of the

present requirement and to invite participation in the development of amendments to the law which will be professionally acceptable and administratively workable.

The House also adopted a resolution declaring that the AMA strongly support amendment of the Social Security Act, including Title XIX, to permit payments without assignments for medical care of the patient.

The House rejected three resolutions and one report defining usual, customary and reasonable charges. Instead, it adopted a resolution which said that the definitions of the words "usual," "customary" and "reasonable" be considered, within the fundamental framework of individual determination, the responsibility of the constituent state medical societies, with the understanding that the advice and counsel of the AMA be made available to those states requesting such assistance.

Selective Service Proposals

The House adopted a report seeking federal legislation to establish a National Commission on Health Resources and Medical Manpower. The commission would revise the "doctor draft" system and establish physician allocation priorities to maintain a proper balance of health personnel in civilian and government service.

The report, prepared by the Council on National Security, cited three basic flaws in the Selective Service System as it pertains to the selection of physicians for military service: 1) There is no medical group directing the allocation of physicians; 2) There is no medical group directing the priorities to be used for calling physicians to active duty; 3) There is a need for a stronger medical voice within the Department of Defense.

The proposed commission would be appointed by the President with consent of the Senate. It would replace the Health Resources Advisory Committee and the National Advisory Committee to Selective Service.

Prescribing of Drugs

The House adopted a report by the Board of Trustees reaffirming the position of the AMA regarding the prescribing of drugs. The report states:

"The present policy of the American Medical Association is that physicians should be free to prescribe drugs generically or by brand name for *all* of their patients, whether they are paying, Medicare, or indigent patients—the primary consideration being the best interests of the patient. Medical considerations must be paramount in the selection of drugs. In addition, the physician also has an obligation to be mindful of the economic consequences of the treatment he prescribes."

Choice of a Laboratory

The House adopted a report of the Judicial Council which answered questions which have been raised about laboratory services. The report stated:

"Medical considerations, not cost, must be paramount when the physician chooses a laboratory. The physician who disregards quality as the primary criterion or who chooses a laboratory because it provides him with low cost laboratory services on which he charges the patient a profit, is derelict in not acting in the best interests of his patient. However, if reliable quality laboratory services are available at lower cost, the *patient* should have the benefit of the savings."

Statement on Chiropractic

On recommendation of the Board of Trustees, the House adopted a policy statement submitted by the Committee on Quackery. The statement notes "the position of the medical profession that chiropractic is an unscientific cult whose practitioners lack the necessary training and background to diagnose and treat human disease" and pointed out that "decisions by the nation's highest courts [justify] the medical profession's educational programs of alerting the nation to the public health threat posed by the cult of chiropractic."

Statement on Alcoholism

The House reaffirmed the 1956 policy statement on admission of alcoholics to general hospitals. The statement urged hospital administrators and medical staffs to look upon alcoholism as a medical problem and to admit patients who are alcoholics to their hospitals for treatment, with such admissions being made after due examination, investigation and consideration of the individual patient. The House, in Las Vegas, recommended more adequate implementation of the 1956 statement and urged that "insurance companies and prepayment plans be encouraged to remove unrealistic limitations on the extent of coverage afforded for the treatment of alcoholism."

Payments for Professional Services

To clarify AMA policies as they now exist, the House adopted the following eight-point statement regarding payment for professional medical services:

"1. It is proper for the physician to establish the fee which he charges to any patient for the professional service rendered, with recognition of the fact that a duly constituted committee of his peers may appropriately review and pass upon the equity and justice of his charge.

"2. It is proper for third party agencies to make payment of professional medical fees in behalf of patients, with recognition of the fact that the service of the physician has been to the patient and the liability for payment rests primarily with the patient or his family.

"3. It is proper for a physician to work cooperatively with other physicians in a team approach to the provision of medical service, with recognition of the fact that each cooperating physician is entitled to compensation according to the value of his services, and that the charges attributable to each physician's service shall be made clearly known to the patient.

Continued



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In Neo-Synalar, fluocinoline acetonide controls the inflammation and provides rapid relief from associated pruritus. At the same time, its antibacterial component—neomycin—combats superficial infection caused by many gram-positive and gram-negative bacilli[2] that often colonize and thrive on abraded skin.[1]

A specially formulated vanishing cream base that is greaseless and odor free makes Neo-Synalar cosmetically appealing, and encourages greater patient cooperation.

controls the infection

stops the scratch

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Neomycin rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Neo-Synalar under certain conditions. **Availability:** Neo-Synalar Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. **2.** Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

"4. It is proper for a physician who provides personal supervision and direction for physician-in-training to charge for the professional medical service rendered.

"5. A physician should not enter into a contract or agreement with a hospital whereby the hospital acts as the agent for a physician unless it is with the consent of the physician and of the medical staff. The physician and the medical staff, as principals, should not approve any contract whose terms or conditions are inconsistent with the Principles of Medical Ethics and established policy of the American Medical Association.

"6. Physicians, collectively in hospitals, may properly establish special medical staff funds, wholly under their own control, which they may support as they see fit and disburse as they may agree.

"7. Fees for professional medical services are properly paid only to the responsible physicians and may not be appropriated by any other person or agency.

"8. The physician is the sole arbiter as to the ways in which he may dispose of his professional income, without duress, consistent with the laws of the land and the Principles of Medical Ethics of this Association."

Compensation for House Officers

The House approved the first four sections of a joint report by the Council on Medical Education and Council on Medical Service. Those sections provided new guidelines on the utilization of private patients in teaching programs; recommended principles to govern the assignment of professional responsibility of house officers for the care of paying patients; presented interpretations of the 1961 statements by the House concerning remuneration of house officers and the increasing responsibility of the medical profession for the development of appropriate methods of financial support for interns and residents, and recommended a statement to guide medical staffs in the development of additional funds to supplement, if necessary, those from hospital sources.

The House then modified or added the final four sections as follows:

E. The presently published provisions for payment under Part A, Title 18, Public Law 89-97 for services rendered to beneficiaries by interns and residents, and under Part B, Title 18, Public Law 89-97 for services rendered by attending physicians supervising interns and residents, are compatible with the organization and administration of programs of graduate medical education according to the standards of the American Medical Association. The principles embodied in these provisions should uniformly apply to regulations governing all other third party medical care plans.

F. It is recommended that sources and amount of compensation for house officers should be determined by local agreement and implemented in accordance with state laws and the ethical principles and policy positions of the American Medical Association.

G. The above principles should be widely publicized so that they may be understood and implemented in good faith by all concerned.

H. The broad and complex nature of the problems in the financial area is recognized, and continued studies and reports thereon by the Council on Medical Service are encouraged. These should include staff compensation, methods of fund collection, control and disposition, and other pertinent and related matters.

Use of the Terms "Ethical" and "Unethical"

The Judicial Council, which had been asked to comment on use of the terms "ethical" and "unethical," submitted the following report which was adopted by the House:

"Historically, the term 'ethical' has been used in opinions and reports of the Judicial Council and in resolutions adopted by the House of Delegates to refer to matters involving (1) moral principles or practices; (2) customs and usages of the medical profession; and (3) matters of policy not necessarily involving issues of morality in the practice of medicine. The term 'unethical' has been used to refer to conduct which fails to conform to these professional standards, customs and usages, or policies, as interpreted by the American Medical Association.

"Unethical conduct involving *moral principles*, values and duties calls for disciplinary action such as censure, suspension, or expulsion from medical society membership.

"Failure to conform to the *customs and usages* of the medical profession may call for disciplinary action depending upon the particular circumstances involved, local attitudes, and how the conduct in question may reflect upon the dignity of and respect for the medical profession.

"In matters strictly of a policy nature, a physician who disagrees with the position of the American Medical Association is entitled to freedom and protection in his point of view."

Other Actions

In considering 63 resolutions, 22 Board reports and a wide variety of additional reports and materials from councils and committees, the House of Delegates also:

Approved establishment of a new Committee on Continuing Medical Education but also urged that lines of authority be clearly defined by the Board of Trustees in consultation with the Council on Medical Education in order to avoid duplication of responsibilities already assigned to the Council;

Instructed AMA members of the Joint Commission on Accreditation of Hospitals to express grave concern regarding the accreditation of hospitals in which laboratories are directed by non-physicians or physicians not adequately qualified in laboratory medicine;

Passed two resolutions opposing the "dual fee" practice of determining the rate of payment for a physician's services solely on the basis of his type of practice;

Approved a Board report recommending that Social Security laws be amended so that physicians entering the program for the first time may obtain earlier eligibility and improved benefits;

Recognized the increasing importance of medical society review committees, reaffirmed the guidelines published in the November 29, 1965, issue of *JAMA* and endorsed additional principles recommended by the Council on Medical Service;

Urged continuing, vigorous effort to dissuade local officials from demanding that physicians sign civil rights compliance statements that are not required by law or by federal directives;

Recommended that state medical societies seek the passage of state legislation which would provide a physician who serves on a utilization review committee immunity from litigation arising from the activities of such committees;

Asked that the Board of Trustees direct the Council on Legislative Activities to continue to pursue with committees of Congress the need for amending the Self-Employed Individuals Tax Act to provide self-employed individuals with opportunities for deferring current earnings and taxes comparable to opportunities presently enjoyed by employed individuals;

Requested the Bureau of the Budget to modify the cost accounting system of veterans' hospitals to permit comparison with cost accounting in community hospitals to the end that economy, efficiency and patient care can be properly assessed in veterans' hospitals;

Reaffirmed its support of the principle that every ethical licensed doctor of medicine who needs and desires them should have staff privileges, commensurate with his training and skill, in at least one accredited community hospital;

Recommended that each hospital should have at least one voting doctor of medicine member on its Governing Board who, preferably, should either be appointed or elected by the hospital medical staff from its membership;

Pointed out that there is a definite need for utilization committees and declared that tax supported hospitals and private hospitals should be governed by the same utilization standards;

Approved Board recommendations that "the AMA support the need for a significant improvement in the income of the registered nurse" and that "the AMA continue to support in principle all current nationally approved educational programs for nurses";

Agreed with the Board that the Council on Postgraduate Programs be renamed as the Council on Scientific Assembly and that its functions be redefined to enable concentration on AMA scientific meetings;

Adopted a resolution that the AMA take measures to insure the attention of medical societies to the need for appropriate utilization of retired physicians and inactive nurses;

Passed a resolution on the determination of elderly applicants' eligibility for automobile liability insurance and driver licensure which said that "although physicians are willing to examine applicants and determine whether or not the applicant meets specified physical standards for automobile liability insurance or for licenses to operate motor vehicles, the determination of what standards should be required or whether the driver is insurable and should be licensed to drive is the responsibility of the insurance companies concerned and of the state agencies issuing licenses, respectively";

Rescinded Resolution 104 which had been adopted by the House in June, 1966;

Endorsed the principle of free choice of physician and medical facility under Title XIX of Public Law 89-97;

Urged that the AMA continue to promote constructive legislation improving existing governmental health plans and continue to offer constructive advice;

Authorized the Board of Trustees to continue the AMA Members Disability Program beyond August 31, 1967; make every effort to continue the program with the same premium-benefit structure; clarify the existing program, and, if necessary, renegotiate a revised program which will be financially sound and will provide the best possible benefits and protection for present and future participants;

Approved a Board recommendation that no special section of *The AMA News* be set aside for county society communications, but that news of county society activities continue to be an important part of *The AMA News;*

Agreed with the Board that, effective January 1, 1967, the AMA should discontinue paying for the rental of the TWX equipment in state medical society offices;

Recommended that driver education should be an integral part of the secondary school curriculum and be offered to all students;

Approved a Council on Medical Service report providing guidelines for collaboration of physician, social worker and lawyer in helping the unmarried mother and her child, and;

Referred to the Board, for consideration and appropriate implementation, a resolution urging the AMA to expand its programs and studies in the field of crime prevention.

Awards and Presentations

At the Monday opening session Dr. Milford O. Rouse, AMA president-elect and former speaker of the House, was presented with a mounted gavel in appreciation of his many years of service to the House and the Association.

Contributions totaling more than $500,000 were presented on Monday to the American Medical Association Education and Research Foundation. They were as follows: Merck Sharp and Dohme, $100,000; California Medical Association, $207,985; Illinois State Medical Society, $185,000; Utah Medical Association, $12,957.50; Medical and Chirurgical Faculty of Maryland, $9,110, and American Urological Association, $1,000.

Glenn W. Geelhoed of Ann Arbor, a medical student at the University of Michigan, was announced on Tuesday

as first-place winner in the Norman A. Welch, M.D., Medical Ethics Essay Contest sponsored by the AMA Judicial Council. At the same session the delegates heard an address by Dr. Malcom E. Phelps, field director of the AMA Volunteer Physicians for Vietnam, who said that the American physician is making a "tremendous impression" on the South Vietnamese people. ◄

F. J. L. Blasingame, M.D.
Executive Vice President
American Medical Association

No One Knows Like the Maker

When physicians encounter an adverse drug reaction, it is not uncommon for them to write to the distributor of the drug, possibly in the form of a complaint or as a request for information on similar experience. Reports are often transmitted through the detailman. No one knows as much about marketing experience with a drug as its distributor. — Ralph G. Smith, M.D., in *Journal of New Drugs*, (6:66), January-February, 1966.

Ban on Brands—A Body Blow

There is certainly room for generic drugs. But the effort to curb the branding of all drugs would be a disastrous body blow to the public. Countless research efforts, conducted at heavy expense both in money and manpower, come to nothing. Others produce valuable but specialized drugs, needed and used by but a few people who would die without them.

The successful drugs in wide use must carry the costs. There is no other way. A trade name is the producer's guarantee of quality. And it rewards research and development which means help to sufferers from the endless ailments which plague mankind. Why put a brake on medical progress — the road to ever better health. —Editorial in *St. Louis County Medical Society Bulletin*, (32:5), Feb. 18, 1966.

Why is a Driver Like a Prescriber?

We live in an age of therapy with potent drugs, and new weapons are coming to hand every year. These changes are to be welcomed; we cannot put back the clock even if we should wish to do so. The problems now posed by motor cars and drugs are in many ways similar.

We must ensure that the price of advance is not too high and that accidents are reduced to a minimum by foresight and care. Both are examined, licensed, and periodically reviewed. Roads and lines of communication of information are improved. The manufacturers are exhorted to introduce the latest safety devices and tests. However, in the final analysis, most depends on the driver and prescriber. — G. M. Wilson, M.D., in *British Medical Journal*, (1:1068-1069), April 30, 1966.

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AMERICAN MEDICAL ASSOCIATION ANNUAL CONVENTION
Date June 18-22, 1967
Place Atlantic City, N.J.

NORTHERN INDIANA PSYCHIATRIC SOCIETY
Date Fourth Wednesday of every month, September through June
Place For location and program, inquire Beatty Memorial Hospital, Westville

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of the month, October through May, excluding December
Place The Athenaeum, Indianapolis

INDIANA STATE DENTAL ASSOCIATION
Date May 14-17, 1967
Place Claypool Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Annual Slide Seminar:
Date April 8, 1967
Place Veterans Administration Hospital, Indianapolis

Medical Microbiology Seminar:
Date May 13-14, 1967
Place Rice Auditorium, Indiana State Board of Health, Indianapolis

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date April 7-8, 1967
Place Morris Inn, Notre Dame University, South Bend

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 12-14, 1967
Place Stouffer Inn, Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Date July 18-20, 1967
Place French Lick Sheraton Hotel, French Lick

INDIANA ACADEMY OF GENERAL PRACTICE
Date May 3-4, 1967
Place Murat Temple, Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date Nov. 1-3, 1967
Place French Lick-Sheraton Hotel, French Lick

BONE AND JOINT CLUB
Date May 3, 1967
Place The Athenaeum, Indianapolis

INDIANA STATE MEDICAL ASSOCIATION CONVENTION
Date October 9-12, 1967
Place Indianapolis

INDIANA PUBLIC HEALTH ASSOCIATION
Date April 25-26, 1967
Place Indianapolis

INDIANA STATE ASSOCIATION OF MEDICAL ASSISTANTS
Date April 28-30, 1967
Place Van Orman-Roberts Hotel, Muncie

INDIANA ROENTGEN SOCIETY
Date May 7, 1967
Place Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Date March 22, 1967
Place Howard Johnson's, 501 W. Washington St., Indianapolis

INDIANA STATE NURSES ASSOCIATION
Date Oct. 12-14, 1967
Place French Lick-Sheraton Hotel, French Lick

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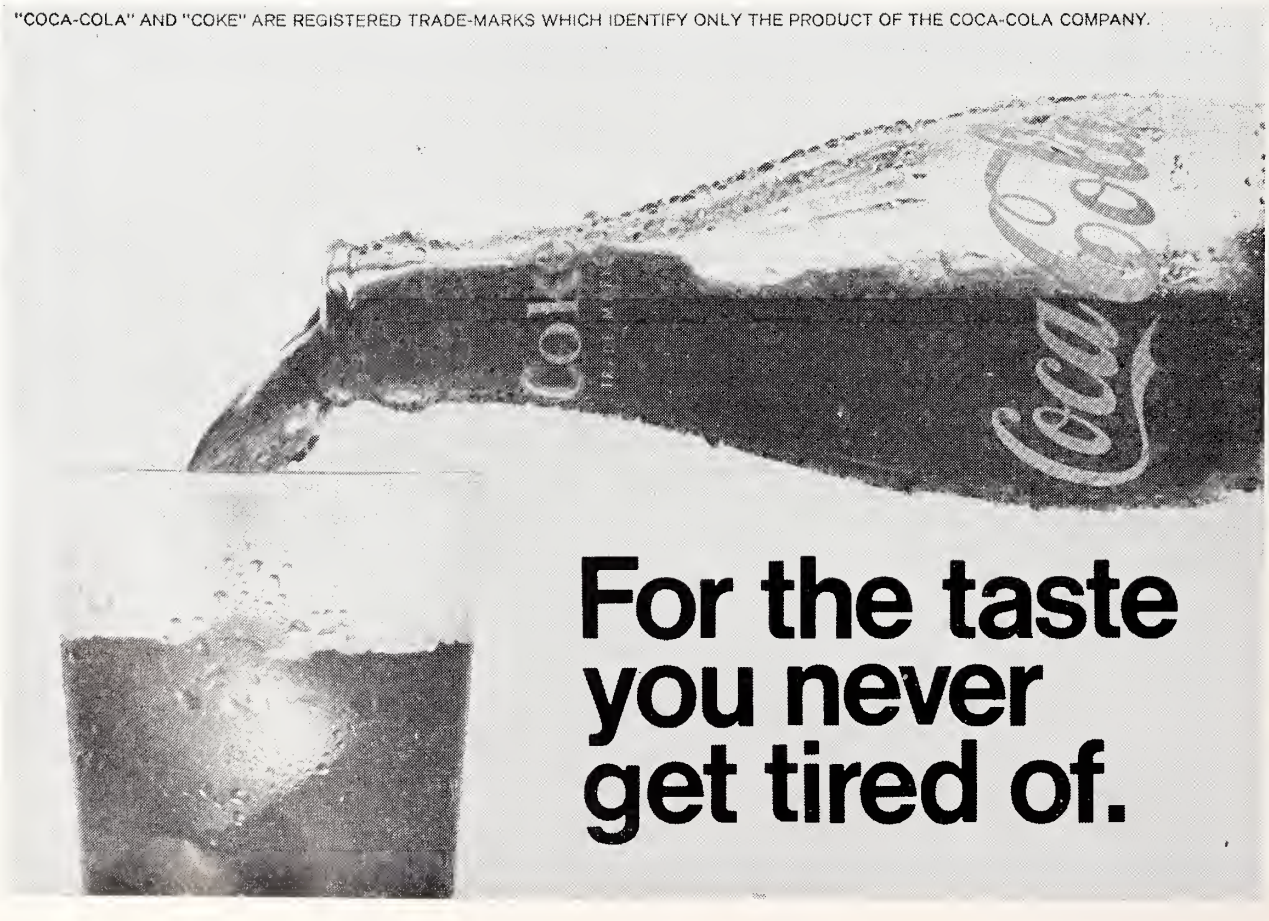
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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—December, 1966

Disease	Dec. 1966	Nov. 1966	Oct. 1966	Dec. 1965	Dec. 1964
Animal Bites	495	599	753	460	403
Chickenpox	350	224	92	389	766
Conjunctivitis	63	36	65	101	123
Diphtheria	0	0	0	0	0
Dysentery, Unspecified	30	43	62	55	99
Gonorrhea	579	322	421	432	349
Impetigo	110	118	188	129	133
Infectious Hepatitis	43	46	35	46	38
Infectious Mononucleosis	53	49	72	79	63
Influenza	644	514	509	1305	820
Measles (Rubeola-Rubella)	92	94	71	306	188
Meningitis, Meningococcal	4	3	3	5	5
Meningitis, Other	4	3	3	7	8
Mumps	306	359	109	168	652
Pertussis (whooping cough)	17	13	6	0	33
Pneumonia	240	184	146	418	261
Poliomyelitis	1	0	0	0	0
Streptococcal Infection	472	390	348	589	611
Syphilis					
Primary & Secondary	3	6	6	14	5
All Other Syphilis	95	66	52	86	84
Tinea Capitis	15	18	13	15	45
Tuberculosis (Active)	128	82	98	105	81

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WANTED: Locations Physicians

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Roland G. Dumonceaux, General Delivery, Grand Forks, North Dakota

Joseph F. Burtka, Box 1785 — 7th Fld. Army Hospital, APO San Francisco 96594, Calif.

Lanny S. Seese, Box 504, APO New York 09240, N. Y.

Joseph J. Baum, 161-A Eisenhower, Sherman, Texas 75090

Artemio S. Libunao, 81 Capitol Hill Dr., St. Louis, Mo. 63136

SPECIALISTS

Mary T. McGloin, 9122 S. Bishop St., Chicago, Ill. 60620—*Anesthesiology*

Robert R. Urquhart, 2653 Lange Ave., San Diego, Calif. 92122—*Internal Medicine*

Evert A. Bruckner, 168 Aspinwall Ave., Brookline, Mass. 02146—*Internal Medicine*

James R. Mason, 706 Tahquamenon Blvd., Newberry, Mich. 49868—*Internal Medicine*

Antion B. Cruz, 3950 Lake Shore, Chicago, Ill. 60613—*Internal Medicine*

Parker A. Towle, 1150 High St., Dedham, Mass. 02026—*Neurology*

Don H. Wood, 919 Magenta St., Bronx, New York—*Neurology*

Neil C. Brown, 259 Springdale Dr., N. E., Atlanta, Ga. 30305—*Neurology*

Leon Smith, 8507 W. Foster Ave., Chicago, Ill. 60656—*Ob-Gyn*

H. King Hartman, 1300 E. 279th St., Euclid, Ohio 44132—*Ophthalmology*

Jose H. Roig, V. A. Hospital, Box 278, Tuskegee, Ala.—*Ophthalmology*

Jackson S. Wu, 3660 Clairemont Dr., San Diego, Calif.—*Pathology*

Thomas B. Walker, 101 Ridgewood Ave., Charlotte, N. C. 28209—*Pediatrics*

John W. Foreman, 232B Dona Ana Loop, Holloman Air Force Base, New Mexico 88330—*Pediatrics*

Irvin A. Ebaugh, Jr., 4940 Audubon Ave., St. Louis, Mo. 63110—*Psychiatry*

Stuart T. Bray, Greenbrier Clinic, White Sulphur Springs, W. Va. 24986—*Radiology*

John A. Gehweiler, Jr., 217 S. Ives Dr., Severna Park, Md.—*Radiology*

John J. McGloin, 9122 S. Bishop St., Chicago, Ill. 60620—*General and Thoracic Surgery*

Robert I. Lowenberg, 4269 Sentinel Post Rd., N.W., Atlanta, Ga. 30327—*Surgery*

Richard L. Collier, 14314 Artesian, Detroit, Mich. 48223—*General Surgery*

Paul H. Kindling, 23029 Gary Lane, St. Clair Shores, Mich. 48080—*General Surgery*

Charles L. Leagus, Jr., 905 Watchung Ave., Plainfield, N. J. 07060—*General Surgery*

Bahram Darugar, P. O. Box 325, Milledgeville State Hospital, Milledgeville, Ga. 31062—*General Surgery*

Ronald D. Snyder, 518 Fountain Dr., Linthicum Heights, Md. 21090—*General Surgery*

Freydoon Eskandari, 646 Hazelwood, Detroit, Mich. 48202—*General Surgery*

Samuel E. Rosenzweig, 501 Hickory, Newllano, La. 71461—*General Surgery*

Kyung J. Ahn, 1900 East Main St., Danville, Ill. 61832—*General and Thoracic Surgery*

Abdel Ghani, 1560 Jean Talon E # 50k, Montreal, P. Q., Canada—*General Surgery*

Alfredo Hirt, 1881 Ridgewood Dr., N.E., Atlanta, Ga. 30307—*Urology*

Iam P. Bhisitkul, Kimbrough Army Hospital, Fort George G. Meade, Md.—*Urology*

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Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Blood-Alcohol Test Result Admissible Despite Possibility of Adulteration of Sample by Formaldehyde—In a suit for damages by a child for injuries sustained when a car driven by her mother went off the road, against the administrator of the estates of her mother and of the owner of the car, a trial court did not err in admitting in evidence the result of a blood-alcohol test made on a sample of blood taken from the mother's body, the Supreme Court of Washington ruled. Although the sample was withdrawn with a tube that had previously been used in embalming procedures, involving the use of formaldehyde, a prima facie showing was made that the test was reliable.

An employee of the coroner's office made the blood-alcohol test without testing for the presence of formaldehyde. The test showed an alcohol content of 0.37%. Death can result when the alcohol content is 0.45%. There was evidence that formaldehyde in blood will give the same result as alcohol in a test.

Before the result of a blood-alcohol test can be admitted in evidence, prima facie proof must be presented that both the test chemicals and the sample were free from adulteration which could conceivably have introduced error into the test result. There was testimony for the child that the tube used to extract the blood had been cleaned in the customary manner before it was used to withdraw the sample. Another witness testified that the manner in which the tube had been cleaned was not reliable, and that serious doubts as to the test's accuracy was raised by the fact that the alcohol content shown by the test should have rendered the subject unable to drive at all. That open beer bottles, bottle openers, and several glasses were found in the car tended to corroborate the test's showing that there was alcohol in the blood. A prima facie showing had been made that the test chemicals and the sample were free from adulteration, and it was for the jury to determine the weight to be given the test result.

It was contended that the coroner had no authority to analyze the blood and that, even if he had, the test result was confidential. It is provided by statute that the coroner may, either in his discretion or upon lawful request, retain such blood and other body specimens taken by him as may be needed or desired as evidence to be presented in court.

Parents are immune to suit by their children for acts committed while in the discharge of parental duties. However, a parent who takes his child with him in an automobile and drives while he is intoxicated temporarily abdicates his parental responsibility and is not entitled to immunity. The trial court's instruction that the child could recover from her mother's estate if the jury found that the mother was driving while intoxicated and that this was a proximate cause of the accident was, therefore, proper, the court said.

Hoffman v. Tracy, 406 P.2d 323 (Wash., Sept. 30, 1965).

Refusal to Submit to Breathalyzer Test Not Within Privilege Against Self-Incrimination—In a prosecution against an accused for drunk driving, evidence that the accused refused to submit to a Breathalyzer test or to perform physical tests was properly admitted, a California intermediate appellate court ruled.

The arresting officer explained to the accused the Field Sobriety Test which involves physical tests and a series of questions. The accused refused to perform any of the tests. He refused to answer any question except for the one as to how much he had drunk, which he answered variously with "nothing" and "two beers." The accused was taken to the police station where the Breathalyzer test was explained to him. He refused to submit to the test.

In *Schmerber v. State of California*, 86 S.Ct. 1826 (See Vol. 13, No. 10, p. 1861), it was held that the admission in evidence of the results of a chemical test of a sample of blood taken from an accused over his objection did not violate his privilege against self-incrimination, because the results were not testimonial or communicative in nature. It was unable to see any constitutional distinction between blood and exhaled air, the court said.

It does not automatically follow from the holding of the Schmerber case that the admission of evidence of an accused's refusal to submit to the test would not violate his privilege against self-incrimination. In a footnote to that decision, a distinction was drawn between compulsion which results in obtaining physical evidence

and compulsion which results in incriminating statements. The question of the admissibility of an accused's refusal to submit was expressly left for future decision.

It was of the opinion that a simple refusal to take the test, which incriminates only because it is probative of a consciousness of guilt, was as admissible as an attempted flight from the scene of the test or an offer to bribe the officer would be, the court said. Therefore, the admission of the evidence that the accused refused to submit to the test did not, under circumstances involved here, violate his privilege against self-incrimination.

The evidence that the accused refused to submit to the physical tests that were a part of the Field Sobriety Test was also properly admitted. The tests involve a greater degree of cooperation than the Breathalyzer test, but the evidence obtained is not of a testimonial or communicative nature.

Some of the questions asked as a part of the Field Sobriety Test were clearly designed to obtain incriminating answers, and the accused had a right to refuse to answer them. Evidence of the accused's refusal to answer the questions would be a violation of his privilege against self-incrimination. However, here no proper objection was made to the evidence of his refusal to answer the questions.

People of the State of California v. Sudduth, 52 Cal. Rptr. 377 (Cal., July 13, 1966).

Comment on Medical Expert's Testimony Prejudicial Error—In a suit for damages against a physician by a patient for injuries caused by his allegedly negligent failure to diagnose her tubal pregnancy, a trial court's comment, in the charge to the jury, on the testimony of the patient's medical expert constituted prejudicial error, the North Carolina Supreme Court ruled. The judgment entered on a jury verdict in favor of the physician was reversed, and a new trial ordered.

The patient consulted the physician because she had not had a menstrual period for three months. A week later she again consulted him when she began a vaginal bleeding. The bleeding continued for several weeks, and the patient had severe pain, abdominal swelling, and a fever. The patient saw the physician frequently during those weeks but her condition did not improve. When the patient suggested the possibility that she had a tubal pregnancy, the physician made laboratory tests which he said showed that she did not have a tubal pregnancy. A dilatation and curettage was also performed during the period. When her condition became progressively worse, the patient consulted another physician who performed an operation for a ruptured tubal pregnancy.

Only one medical expert testified for the patient. In charging the jury, the trial court made the following statement with respect to his testimony: "His answer is difficult of comprehension generally, because he does not say that he thinks at this stage a culdoscopic examination—no, his answer is difficult of comprehension generally, but he does say that he thinks at this stage a culdoscopic examination would be diagnostic, and that is the virtue, is the diagnostic examination." A trial court, in charging the jury, may not express or intimate an opinion as to the facts, the weight of the evidence, or the credibility of the witnesses in any manner, either directly or indirectly. The expression or intimation of any such opinion is prejudicial error. In view of the complex medical and legal problems involved and the fact that the witness was the only medical expert who testified for the patient, the jury was very probably influenced against the patient, the court said. She was, therefore, entitled to a new trial.

Belk v. Schweizer, 149 S.E.2d 565 (N.C., Aug. 26, 1966).

General Practitioner Competent to Testify as to Accepted Practice of Cardiologists—In a suit for damages against a cardiologist by a patient for his alleged negligence in having failed, over a period of six years, to diagnose her hypothyroidism and in not having referred her to another physician for diagnosis, a federal trial court erred in refusing to allow the patient's witness, a general practitioner, to testify as to the accepted practice of cardiologists in the community, the U.S. Court of Appeals for the District of Columbia Circuit ruled. A physician is not incompetent to testify as an expert merely because he is not a specialist in the particular field involved. The training and specialization of a witness goes to the weight, not to the admissibility, of his testimony. The judgment entered on the directed verdict in favor of the cardiologist was reversed, and the case remanded for a new trial.

Baerman v. Reisinger, 363 F.2d 309 (C.A.D. of C., June 1, 1966).

Transfusions Ordered for Newborn Child Over Parents' Religious Objections—Despite the objection of the parents of a four-day-old child that blood transfusions violated their religious beliefs as Jehovah's Witnesses, blood transfusions were ordered for the child by a federal trial court for the District of Columbia. The hospital claimed that the child suffered from a hemolytic disease which could make transfusions necessary to save her life. The issue of religious scruples was moot. Parents can make martyrs of themselves, but they cannot make martyrs of their children before they reach the age of full and legal discretion, at which time they can make their own choice, the court said. (News Release, Washington, D.C., Sept. 28, 1966).

"Battered Baby" Removed From Custody of Parents—The evidence established that a three-year-old girl was a "battered baby," and she was, therefore, a "neglected" child within the meaning of the statute, a New York trial court ruled. The child was placed in the custody of her grandmother under the supervision of the court.

There were burns and raw open sores all over the child's rectum, and bruises on her forehead and arms. Her parents were defensive and evasive throughout their testimony as to how she had been injured. They sought to explain her injuries as having been caused by the child's having been

pushed against a radiator by a dog. The seriousness of the child's injuries, the fact that they were received in the family setting, and the lack of a reasonable explanation therefor warranted the finding of the "battered baby" syndrome.

In re Frances, 267 N.Y.S.2d 566 (N.Y., March 4, 1966).

Diabetic Negligent in Continuing to Drive After Onset of Insulin Reaction—A policeman who was injured in an automobile accident, which occurred when an unconscious driver that he was attempting to help suddenly revived and accelerated the car, was entitled to recover damages in a suit against the driver, a Louisiana intermediate appellate court ruled.

When the driver, who had been diabetic for a number of years, became aware of the onset of an insulin reaction, he did not drink a coke or eat a candy bar, both of which he had available in the car, but continued to drive. At some time thereafter, he blacked out and, while in that condition, brought the car to a stop but did not turn the motor off. He remained in the car, slumped over the wheel.

The policeman was sent to investigate. He became aware, almost immediately, that the driver was not intoxicated. The policeman managed to get in the car, and, while he was sitting beside the driver trying to help him, the driver suddenly revived and accelerated the car.

The driver was clearly negligent in continuing to drive after becoming aware of the onset of the insulin reaction, since he knew full well that, by so doing, he was subjecting all persons to a grossly unreasonable risk. His negligence continued to operate after he brought the car to a stop, since his stopping of the car was not a conscious act. The policeman's failure to turn off the motor after he got into the car did not constitute contributory negligence which would bar recovery. The policeman had the status of a "rescuer." A "rescuer" is not chargeable with negligence merely because he failed to make the wisest choice to accomplish the rescue, the court said.

Gambino v. Lubel, 190 So. 2d 152 (La., July 15, 1966; rehearings denied, Oct. 5, 1966).

Ban On Tattooing Except for Medical Purposes Constitutional—A provision of the New York City Health Code prohibiting the tattooing of a human being except by a physician for medical purposes was constitutional, even though the provision will require the discontinuance of an existing business, the New York Court of Appeals ruled. The evidence established that there was a causal connection between tattooing and hepatitis and that rigorous regulation of lay tattooing would be ineffective.

Grossman v. Baumgartner, 271 N.Y.S.2d 199 (N.Y., June 2, 1966). ◄

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ABSTRACTS

BOOK REVIEWS

CONTROVERSY IN INTERNAL MEDICINE

Edited by Franz J. Ingelfinger, Arnold S. Belman and Maxwell Finland, W. B. Saunders & Co., Philadelphia, 1966; 679 pages; $14.50.

This is a perfectly delightful, exhilarating collection of contrasting opinions on medical problems still in an obvious state of flux. Twenty-three topics are discussed by no less than 73 "all-star" authorities. The style is almost uniformly on the informal, relaxed, roundtable, after dinner level. But no one pontificates! "This — in my opinion — is the gist of the matter!"

One man presents one aspect; another man follows immediately with his viewpoint; then one of the editors summarizes — YOU take your pick!

With so many scintillating chapters, it is almost invidious for me to say "I liked especially . . . ." However, I did enjoy particularly the sound, conservative inspection of such topics as autoimmunity, rheumatoid arthritis, diabetic complications and glomerulonephritis.

This volume fills a very definite need at almost all levels of medical skills. It will be a long time in becoming dated. I can recommend it for the pleasure it will bring and for the knowledge it will impart.

The format and binding are unobtrusively good; the price is within reason. It belongs on our working shelf.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

"OPERATIVE HEART DISEASE" PATHOPHYSIOLOGY, DIAGNOSIS AND TREATMENT

Howard D. Sirak, M.D., The C. B. Mosby Company, St. Louis, 1966, $12.50.

This publication by Dr. Sirak about operable heart disease comprises 125 pages. The subject is presented with clarity, lucidity and simplicity. It is very basic in its approach and no surgical variants are included. The price of $12.50 seems out of line with the number of pages and probably has resulted from the large number of plates enclosed. One wonders to what audience this is directed. It lacks clinical depth, lacks surgical technic depth and therefore probably would not be read by the cardiologist or the cardiac surgeon. The medical student scarcely has time to get into such an obtuse area of medical education.

The diagrams and x-rays selected are quite good and very instructive. The use of the term "Eisenmenger lung," possesses unique clinical-pathologic clarity. Several errors are noted throughout and the most blatant one is found on page 71 where the statement is made that surgery in pulmonic stenosis is indicated in all individuals whose pulmonary artery pressure exceeds 70 mm. HG systolic. In pulmonic stenosis, the pulmonary artery pressures are low and the author really meant to use "whose right ventricular pressure exceeds 70 mm." One would have wished that more time had been spent on the low output syndrome occurring in the postoperative period, especially its pathophysiology and management. Finally, the statement on page 120 indicating "the presence of an opening snap is good clinical evidence of sufficient residual suppleness in the leaflets" is a little too broad and, to cardiologists, inaccurate. We relate the existence of an opening snap to mobility primarily in the anterior mitral leaflets.

This text is easy reading, contains information of value, has a



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narrow audience, and perhaps would serve best as a pleasant review of a very complex subject.

A. D. DENNISON, JR., M.D.
Indianapolis

DISORDERS OF CARBOHYDRATE METABOLISM IN INFANCY

Marvin Cornblath and Robert Schwarz, W. B. Saunders Co., Philadelphia, 1966; 297 pages with numerous illustrations; $8.50. (Vol. III in series on "Major Problems in Clinical Pediatrics.")

Having reviewed no less than TWO CIBA symposia on glycogen and also diabetes recently (*JISMA*, April, 1965), I was rather unprepared for the great quantity of material presented to me with which I was totally unacquainted! The fetus within the pregnant mother as they interact mutually—the exploding field of hereditary metabolic disorders—the hypoglycemic syndromes of infancy—the sugar malabsorption syndromes: all are presented in great but not cloying detail. The two appendices are jam-packed with useful information; each chapter closes with an excellent, up-to-date bibliography.

The print is clear, I saw almost no typographical errors; as usual, the binding and format are of high quality and the price is within reason.

The obstetrician as well as the pediatrician will find much to interest him. Also, the internist (such as myself) and the general practitioner should find much to interest him. The authors are to be commended for clear writing, a minimum of logorrhea and a maximum of information. This will not be out-dated for many years to come.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

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Abstracts From Various Literature, Prepared by AMA

INCIDENCE AND PREDICTION OF ISCHEMIC HEART DISEASE IN LONDON BUSMEN

J. N. Morris et al. (The London Hosp. Research Laboratories, Ashfield St., London)

Lancet 2:553-559, (Sept. 10), 1966.

A sample of 667 middle-aged London busmen who showed no evidence of ischemic heart disease when first examined were followed up for five years. During this period 47 of them developed the disease (7%). The incidence is higher in later than in early middle-age, in men with a bad family history of parental death, in drivers than conductors, in cigarette smokers, in the more obese, and in the shortest men. Levels of causal systolic blood-pressure (SBP) and of plasma-cholesterol are the predominant predictive factors. Three-quarters of the new cases were among the men who were in the top quarter of the distribution of either SBP or plasma-cholesterol. The important question today is whether long-term reduction of hypertension and hypercholesterolemia will in turn reduce the incidence of the disease.

MAGNESIUM DEPLETION IN NORMAL MAN

M. J. Dunn (Johns Hopkins Hosp., Baltimore) and M. Walser

Metabolism 15:884-895, (Oct.), 1966.

Two normal subjects were depleted of magnesium for 39 and 49 days, respectively, by a diet low in magnesium (1 to 2.5 millimols), high in calcium (30 to 50 millimols), and normal in protein and caloric content. Intravenous infusions of sodium and potassium sulfate were given frequently in order to augment renal magnesium loss. However, the principle magnesium loss occurred through fecal excretion, which exceeded intake, evidently as a result of the high calcium intake. Both calcium and magnesium clearance fell markedly. Cumulative negative magnesium balance amounted to 92 and 86 millimols, respectively, or 8% to 10% of body magnesium. Calcium balance was zero. No increase in magnesium loss followed the ingestion of 10 oz. of whiskey daily. Plasma calcium remained normal, but plasma and erythrocyte magnesium fell moderately. Muscle magnesium remained normal; consequently the source of the lost magnesium must have been bone. No untoward effects occurred. Thus it is postulated that magnesium depletion as the etiological cause of various symptoms or syndromes may be highly exaggerated.

GASTROINTESTINAL FUNCTION FOLLOWING VAGOTOMY AND PYLOROPLASTY

G. D. Argyropoulos (19 Dimacopoulou St., Athens, Greece) and M. E. E. White

Arch. Surg. 93:578-582, (Oct.), 1966.

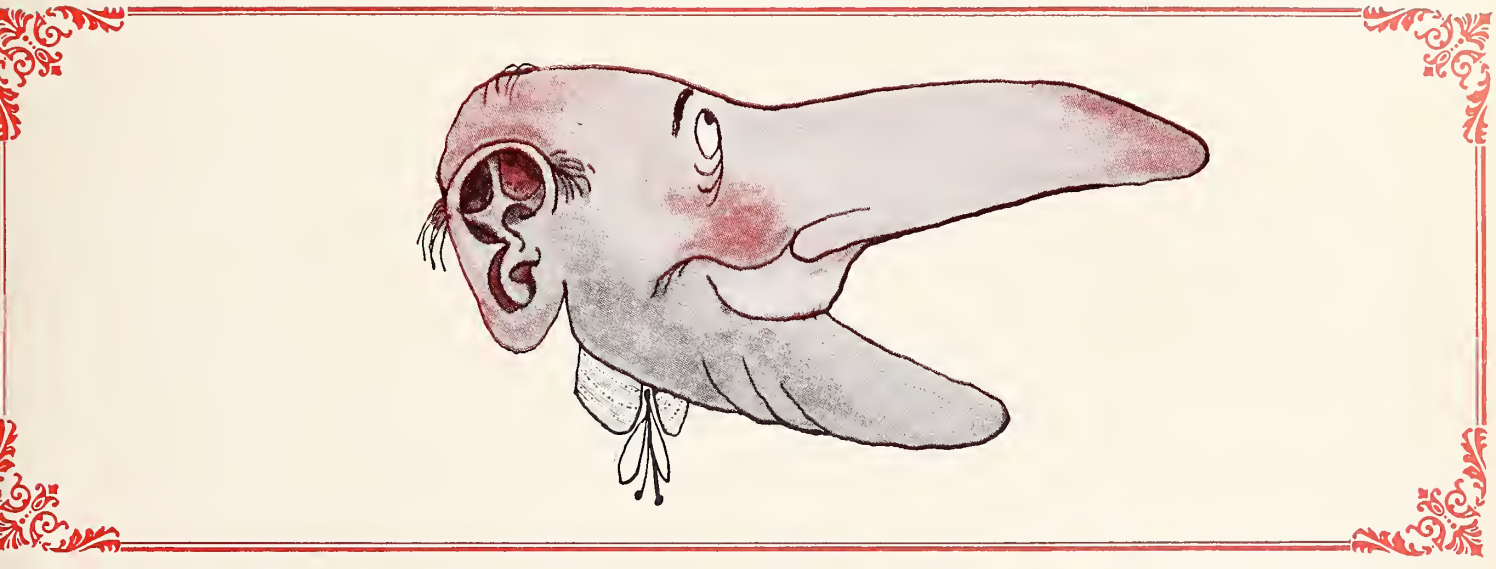
Gastrointestinal function was investigated in 45 patients after vagotomy and pyloroplasty for gastric and duodenal ulcers. Appropriate positioning of the patient immediately after operation resulted in adequate emptying during the adynamic phase of gastric function. Early emptying of the stomach in six hours after vagotomy and pyloroplasty was demonstrated, and intestinal motility and absorption were unimpaired. Gastric decompression as a rountine measure can be avoided, and a more generous attitude toward oral intake of fluids is recommended. The absence of bowel sounds during the first 24 postoperative hours does not necessarily imply absence of peristalsis and

Continued on page 225.

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DOSAGE: **Adults:** *Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. *Nasal Spray*—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. **Children under 12:** *Pediatric Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used in infants under 6 months. *Pediatric Nasal Spray*—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. SUPPLIED: OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) *Nasal Solution*, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. *Nasal Spray*, 0.1%; plastic squeeze tubes of 15 ml. *Pediatric Nasal Solution*, 0.05%; dropper bottles of 1 fluidounce. *Pediatric Nasal Spray*, 0.05%; plastic squeeze tubes of 15 ml. *Nasal Solutions* contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. *Nasal Sprays* contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. *Consult complete literature before prescribing.*
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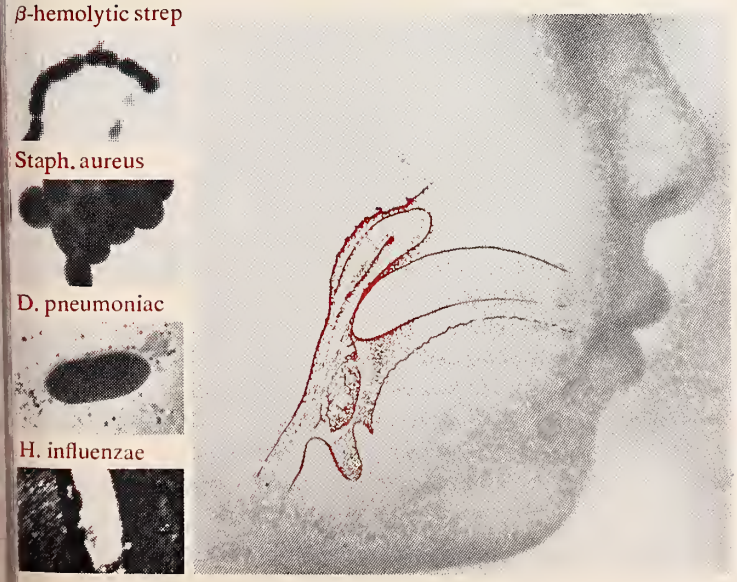

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Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants or infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed. Data insufficient on prolonged or recurrent therapy in chronic renal diseases of children.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Following may occur: headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Dosage: Children—1 teasp./20 lbs initially, followed by ½ teasp./20 lbs b.i.d. *Adults*—4 teasp. initially, followed by 2 teasp. b.i.d. or t.i.d., depending upon severity of infection.

How Supplied: Suspension 10%, 0.5 Gm sulfamethoxazole/5 cc teasp., cherry-flavored, bottles of 16 oz.

References: 1. Braden, B., and Colmore, J. P.: *J. Oklahoma M.A., 57*:7, 1964. 2. Alban, J.: *Am. J. Dis. Child., 109*:304, 1965. 3. Reichelderfer, T. E.: *Clin. Med., 71*:1045, 1964. 4. Jackson, H.; Cooper, J.; Mellinger, W. J., and Olsen, A. R.: *Southwestern Med., 44*:246, 1963. 5. Braden, B.; Colmore, J. P., and Cummings, M. M.: Antimicrobial Agents Annual—1960, p. 54. 6. Peters, J. H.: Data adapted from a Scientific Exhibit presented at the Spring Meeting of the American Academy of Pediatrics, April 26-29, 1965. 7. Peters, J. H.: Antimicrobial Agents and Chemotherapy—1961, p. 406. 8. Elia, J. C.: *Eye Ear Nose & Throat Month., 41*:722, 1962. 9. Patton, J. M.: *West. Med., 5*:46, 1964. 10. Chastain, P. J.: *J. Florida M.A., 48*:816, 1962. 11. Grater, W. C.: *Antibiotics & Chemother., 12*:450, 1962. 12. Exline, A. L.: *Colorado GP, 5*:(5),11, 1963.

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*Marks, V., and Dawson, A.: Brit. M. J. 1:293, 1965.



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Continued

has no diagnostic value. The delayed appearance of gastric dilatation can be treated by appropriate posture.

GAS IN THE PORTAL VEIN: REPORT OF TWO CASES

N. M. Sheiner, M. J. Palayew, and I. Sedlezky (Jewish General Hosp., Montreal)

Canad. Med. Assoc. J. 95:611-615, (Sept. 17), 1966.

Gas in the portal venous system was observed in two female patients aged 61 and 72 years, respectively. In the first instance the gas was detected preoperatively on plain roentgenograms of the abdomen and in the second the gas was noted in the mesenteric vessels at the time of operation and was confirmed by x-rays taken shortly after death. Both patients demonstrated intestinal necrosis due in one case to a small bowel volvulus around a mesenteric band and in the second to occlusions of the celiac axis and superior and inferior mesenteric arteries. Both patients died. Gas in the portal venous system can be recognized on plain roentgenograms of the abdomen as a slender, branching linear gas pattern in the periphery of the hepatic parenchyma. The detection of such portal gas in the adult would imply intestinal necrosis in the majority of cases and should lead to an early operation.

LATE RESULTS OF MEDICAL AND SURGICAL TREATMENT OF BLEEDING PEPTIC ULCER

H. A. Serebro and A. I. Mendeloff (Sinai Hosp., Baltimore)

Lancet 2:505-508, (Sept. 3), 1966.

Of 176 patients admitted with a diagnosis of hemorrhage from peptic ulcer, 164 left the hospital alive. Since 12 of these patients had undergone vagotomy with a drainage procedure—a technic not under study in this report—they were excluded from the data. Efforts were successful in identifying the subsequent course of 126 of the remaining 152 patients (84%). Initially, 34 patients were treated surgically and 11 of these bled again during the period of follow-up. Of the 26 patients who were operated on subsequently during repeated admissions to the hospital, seven bled again. The remaining 26 patients were treated only medically and 33 of these bled repeatedly. Thus, 51 patients (40%) showed a tendency to bleed again after any kind of treatment.

HEPATIC FUNCTION TEST: POSTOPERATIVE CHANGES WITH HALOTHANE OR DIETHYL ETHER ANESTHESIA

B. Dawson et al. (Mayo Clinic, Rochester, Minn.)

Mayo Clin. Proc. 41:599-607, (Sept.), 1966.

Liver-function tests were performed before and after operation on 100 patients selected at random from those undergoing abdominal surgery in which the liver was available for biopsy. Fifty patients had received an anesthetic sequence with halothane, and 50 had received diethyl ether. Trivial abnormalities in the test results were found in 4% of patients prior to operation. Abnormal liver histological findings were noted at the time of operation in 13.3%. The combination of abnormal results of liver-function tests and of abnormal liver histological findings was seen in only two patients. Minor but significant alterations in liver function occurred after operation in 30 patients, 17 following halothane anesthesia and 13 after diethyl ether. Evidence of more serious impairment of liver function was noted in three patients after operation. Two of the three had received diethyl ether and one, halothane. ◄

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Signemycin 375—high-potency capsules for simpler administration, greater patient economy

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(tetracycline HCl 250 mg. triacetyloleandomycin 125 mg.)

Indications: Indicated in the therapy of acute severe infections caused by susceptible organisms and primarily by bacteria more sensitive to the combination than to either component alone. In any infection in which the patient can be expected to respond to a single antibiotic, the combination is not recommended. Signemycin should not be used where a bacteriologically more effective or less toxic agent is available. *Triacetyloleandomycin, a constituent of Signemycin, has been associated with deleterious changes in liver function.* See precautions and adverse reactions.
Contraindications: Contraindicated in individuals who have shown hypersensitivity to any of its components. Not recommended for prophylaxis or in the management of infectious processes which may require more than 10 days of continuous therapy. If clinical judgement dictates therapy for longer periods, serial monitoring of liver function is recommended. Not recommended for subjects who have shown abnormal liver function tests, or hepatotoxic reactions to triacetyloleandomycin.
Precautions and Adverse Reactions: Triacetyloleandomycin, administered to adults in daily oral doses of 1.0 gm. for 10 or more days, may produce hepatic dysfunction and jaundice. Adults requiring 3 gm. of Signemycin initially should have liver function followed carefully and the dosage should be reduced as promptly as possible to the usual recommended range of 1.0 to 2.0 gm. per day. Present clinical experience indicates that the observed changes in liver function are reversible after discontinuation of the drug.
Use with caution in lower than usual doses in cases with renal impairment to avoid accumulation of tetracycline and possible liver toxicity. If therapy is prolonged under such circumstances, tetracycline serum levels may be advisable. In long term therapy or with intensive treatment or in known or suspected renal dysfunction, periodic laboratory evaluation of the hematopoietic, renal and hepatic systems should be done. Formation of an apparently harmless calcium complex with tetracycline in any bone forming tissue may occur. Use of tetracycline during tooth development (3rd trimester of pregnancy, infancy and early childhood) may cause discoloration of the teeth. Reversible increased intracranial pressure due to an unknown mechanism has been observed occasionally in infants receiving tetracycline. Glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and definite allergic reactions occur rarely. Severe anaphylactoid reactions have been reported as due to triacetyloleandomycin. Photosensitivity and photoallergic reactions (due to the tetracycline) occur rarely. Medication should be discontinued when evidence of significant adverse side effects or reaction is present. Patients should be carefully observed for evidence of overgrowth of nonsusceptible organisms including fungi, which occurs occasionally, and which indicates this drug should be discontinued and appropriate therapy instituted. Steps should be taken to avoid masking syphilis when treating gonorrhea.



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Dr. Rice Retires from Eli Lilly & Company; Joins Staff of PMA



Dr. Rice

Dr. Raymond M. Rice, Indianapolis, group vice-president of science and medicine for Eli Lilly and Company, retired on December 31 after more than 30 years with Lilly.

He is now serving as vice-president of the Pharmaceutical Manufacturers Association Foundation in Washington, D.C.. The foundation was established in 1965 to promote public health through scientific and medical research.

John Twyman Honored

Mr. John Twyman, Executive Director of the Lake County Medical Society, was honored recently by the Gary Newspaper Guild when he was awarded the Gary Post-Tribune's annual recognition for community service—the "Page One Citation."

This "man-of-the-year" award was accompanied by a citation which listed the many public spirited organizations and endeavors for which John has been the "sparkplug," secretary or president. John's modest appraisal of the award is "even an exec is occasionally recognized for what his medical society does in a community."

Curator Speaker for March John Shaw Billings History of Medicine Meeting

Mr. Walter Necker, curator of the Wood Memorial Library and Museum of Anesthesiology, Park Ridge, Ill., will be guest speaker at the March 9 meeting of the John Shaw Billings History of Medicine Society.

Mr. Necker's topic will be "The History and Function of Medical Museums." The group meets at the I.U. Student Union Building, Indianapolis. The social hour begins at 6:00 p.m., dinner is set f 6:45 p.m. and the speaker at 8 p.m.

Dr. Bloom at Project Viet Nam

Dr. George R. Bloom, Elkhart general practitioner, is on a 60-d period of service with Project Viet Nam. He left January 2 with group of volunteer physicians, all of whom are helping to reinfor the civilian doctors of that country in caring for the populace. D Bloom's period of service ends March 2.

Good Housekeeping Offers Special 12-Page Reprints on Intimate Health Problems

For the first time, the 12-page Better Way Section of *Good Hous keeping Magazine* has been devoted to a single subject—a woman health.

Better Way editors spent months researching this project whi appeared in the January issue. They have up-dated and summariz previously published Better Way material, and added new informati gathered with the cooperation of a number of leading medic authorities.

Mothers of young girls will find this section of special value, f it is often difficult to explain "the facts of life" knowledgeably a authoritatively to children.

The report is intended as a basic education guide covering su subjects as: body functions, (ovulation, menstruation and men pause); the medical checkups every woman needs; symptoms a treatment of the most common female disorders; the problems pregnancy; childbirth; use of medications and a summary of co traceptive methods.

Individual reprints of the section are available for $.25. Bulk rat on request. Write to Good Housekeeping Bulletin Service, BWG 959 Eighth Ave., New York, N. Y. 10019. Include your zip code.

New VA Hospital Director

Mr. John L. McParland, director of the VA Hospital at Fo Wayne, has been appointed director of the VA Research Hospital Chicago. Mr. Wilfred Stonebraker, recently director of the VA Ho pital at Poplar Bluff, Missouri, will be the new director at Fo Wayne.

English, Indiana Dedicates New Center; Acquires New Physician

English, Indiana has dedicated its medical center and Dr. Sen Encinas, a native of the Philippines, and an American citizen a postgraduate student in the U. S. for the past ten years, beg practice recently.

The center was built as a result of initiative on the part of t citizens of English, and the cooperation and help of the Sears-Roebu Foundation.

Dr. Christian Appointed

Dr. John E. Christian, Lafayette, head of the Bionucleonics l partment of Purdue University, has been appointed to the Aton Energy Commission's Advisory Committee on Medical Uses Isotopes.

"Neonatal Respiratory Adaptation" Book Now Available to Physicians

"Neonatal Respiratory Adaptation" is a new book published the National Institute of Child Health and Human Developm which gives special emphasis to the problems faced in establishi adequate respiration in the newborn infant. It is based on a c ference held in Princeton, New Jersey, in 1963.

Dr. Thomas K. Oliver, pediatrician of the University of Wa

igton is the editor. It may be purchased from the Superintendent f Documents, U. S. Government Printing Office, Washington, D.C. or $1.25. Single free copies are available from the Public Informaon Branch, National Institute of Child Health, Bethesda, Maryand 20014.

Dr. Austin Smith Promoted

Dr. Austin Smith, at one time editor of *The Journal of the Americn Medical Association*, and recently president of the Pharmaceutil Manufacturers Association, and who has been vice chairman of e Board of Parke-Davis since January 1, 1966, has been elevated chairman and chief executive officer. Harry J. Loynd retired as airman on Dec. 31, 1966.

AMA Offers Literature, Films To Aid Physician Counseling

When parents and their teenage offspring begin pondering the erits of a career in medicine or one of its allied fields, it is only tural that they should turn to their physician for advice and unsel.

Most physicians no doubt experience a mounting number of such rsonal requests in this era of unparalleled and steadily expanding portunities in medicine and the entire health field.

You can assist those making career inquiries by looking to the MA for a helping hand to augment any personal advice or sugstions that you have. As a service to members, the association fers a variety of complimentary literature and other aids deribing guidelines for students seeking to prepare for rewarding reers in medicine or its allied fields.

Although the AMA has been conducting an extensive careers proam since 1960 to encourage qualified students to embark upon edical study, some physicians are not yet personally aware that erature is available to them without charge.

Nor is the extent of this programming effort known. Interest in edicine and allied careers has snowballed to the point where the MA currently handles up to 35,000 individual career inquiries anually from physicians, individuals in allied professions and ocpations, members of women's auxiliaries, counselors, libraries, udents and parents. That is an average of 130 inquiries per workg day. But during peak periods—October-November and March-pril—when many schools and communities conduct special careers ograms, as many as 300 a day are received.

Since 1960, the AMA has expended more than $750,000 in developg and carrying out its comprehensive careers programming effort.

The AMA's latest contribution to health careers literature is the lorful, 144-page paperback, *Horizons Unlimited*, introduced last pril. Designed primarily for upper high school and beginning college udents and those concerned with counseling, the two-part publication vers medicine in depth and highlights career opportunities existg in eight major allied fields.

Attesting to the popularity of this timely publication with physians, counselors, students, medical schools and others actively conrned with health careers informational programming is the fact at more than 125,000 copies have been distributed in eight months.

Many physicians are distributing copies of this publication to embers of Future Physicians Clubs or Medical Explorer Posts hich they advise. Others have found it beneficial to place a copy two in their reception rooms where it can call patients' attention to e fact that opportunities abound today in medicine and its allied elds because of the medical team's ever-expanding efforts to imove and expand health care services and the public's increasing mand for more and better medical care.

The following is a list of literature and aids which may be requested from the AMA:

AMA CAREERS MATERIALS

Literature

"Horizons Unlimited" (144-page paperback)

"The Opportunities and Rewards of Medicine Can Be Yours" (8-page pamphlet)

"Why So Few Women Doctors?" (8-page pamphlet reprinted from *Today's Health*)

"Maybe He CAN Become a Doctor" (8-page *Today's Health* reprint listing scholarship and loan sources)

"Medical Education Loan Guarantee Program" (4-page pamphlet)

"Medical Scholarship and Loan Fund Programs Administered by Medical Societies" (60-page pamphlet)

Programming Aids

Flyer describing the AMA film, "I Am a Doctor"

A list of more than 30 available films on medical and allied careers

Flyer describing the AMA exhibit, "A Career in Medicine"

"How to Get the Best Students into Medicine" (reprint of a *PR Doctor* depth article)

"Here's 'How' to Health Careers" (reprint of a *PR Doctor* depth article)

Color poster, "Put Yourself in This Picture of Health," 18½" x 22⅞" at $1.00 each

Speeches

"The Exciting Field of Medicine" (about 15 minutes)

"Wanted: People Who Want to Help People" (about 20 minutes—deals primarily with opportunities in the allied fields)

Lists of AMA-Approved Schools

Approved schools of x-ray technology

Accredited schools for medical record librarians and approved schools for medical record technicians

Accredited schools of medical technology

Accredited schools in occupational therapy

Accredited schools of physical therapy

Approved schools of cytotechnology

Approved schools on inhalation therapy

To assure prompt handling, please direct all inquiries to the Program Services Department, American Medical Association, 535 North Dearborn St., Chicago, Ill. 60610. Please allow 2-3 weeks for delivery. On "rush" orders, please state date materials are needed.

Local Scholarship Awarded

Kenneth Lee Culbertson of Indiana University School of Medicine is one of eleven first-year medical students in the United States and Canada who have been awarded full scholarships by the New York Life Insurance Company.

The scholarships are comprehensive and cover tuition, room, board, fees, books and equipment, and will be renewed from year to year as long as the recipient remains in the upper half of the class scholastically.

Revised International Certificate Of Vaccination Is Now Available

The 1967 revision of the International Certificate of Vaccination is now available from the Government Printing Office, Washington,

Continued





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Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

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This single-prescription, nonnarcotic product, however, usually provides effective analgesia *and* helps put the patient's mind at ease.

NEWS NOTES

Continued

D. C. 20402, at 10 cents a copy or $5.00 per hundred. Use of the revised form is mandatory after Jan. 1, 1967.

Certificates already issued remain valid until the expiration date. The revised certificate conforms to the form recommended by the World Health Assembly of May, 1965, and fulfills the requirements of the World Health Organization.

Dr. Frankel Appointed

Dr. Joseph J. Frankel, director of the Veterans Administration Hospital in Indianapolis, has been appointed director of the Chicago West Side VA Hospital.

Walton, Indiana Dedicates New Center; Acquires New Physician

A new medical center was dedicated in Walton, Indiana, on January 8. The center was built through the joint efforts of the citizens of the region and the Sears-Roebuck Foundation. More than 1,300 of the area's 2,200 families contributed to the project.

The towns of Galveston, Onward, Young America, New Waverly and Walton were all concerned. Dr. Victor Rivera, a native of Lima, Peru, a veteran of six years of intern and residency training at Hamilton, Ohio, will practice in the new center.

Dr. Bodnar Presents Paper

Dr. Leslie M. Bodnar, South Bend, presented a paper in the scientific program of the annual meeting of the American Academy of Orthopaedic Surgeons in San Francisco on January 14 to 19.

Public Health Service Announces Release of Three Free Medical Films

The Public Health Service announces the release of three medical films, each available on free short-term loan from the Public Health Service Audiovisual Facility, Atlanta, Georgia, 30333, as follows: "Modification of the Schoenheimer-Sperry Method for Free and Total Cholesterol" which teaches laboratory technicians a precise and accurate method for analysis of blood sera; "Technique of Platelet Transfusion" which presents a step-by-step demonstration of the platelet separation process and portrays the family's role in contributing to a leukemic child's well-being through platelet transfusions; "Fiberscope Endoscopy of the Upper Digestive Tract" which shows how the fiberscope is used in an endoscopic examination of the stomach and duodenal cap and explains the principles of fiber optics.

Dr. Manning Cited

Dr. George C. Manning, Fort Wayne, has received a Certificate of Award for an outstanding article written for Medical Economics during 1966.

"Sexual Adjustment in Marriage" Is New Public Affairs Pamphlet

"Sexual Adjustment in Marriage" is the title of a recently published Public Affairs pamphlet. Authors are Richard H. Klemer, marriage counselor and his wife, Margaret G. Klemer who teaches maternity nursing.

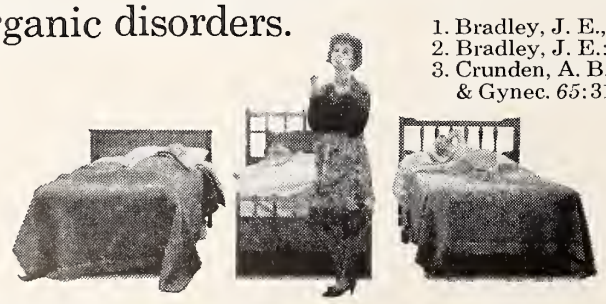
The 28-page booklet is written for lay reading as an adjunct to professional counseling. It may be obtained for 25 cents from Public Affairs Committee, 381 Park Ave., South, New York City 10016. Quantity discounts are available for orders in excess of 10 copies. ◄



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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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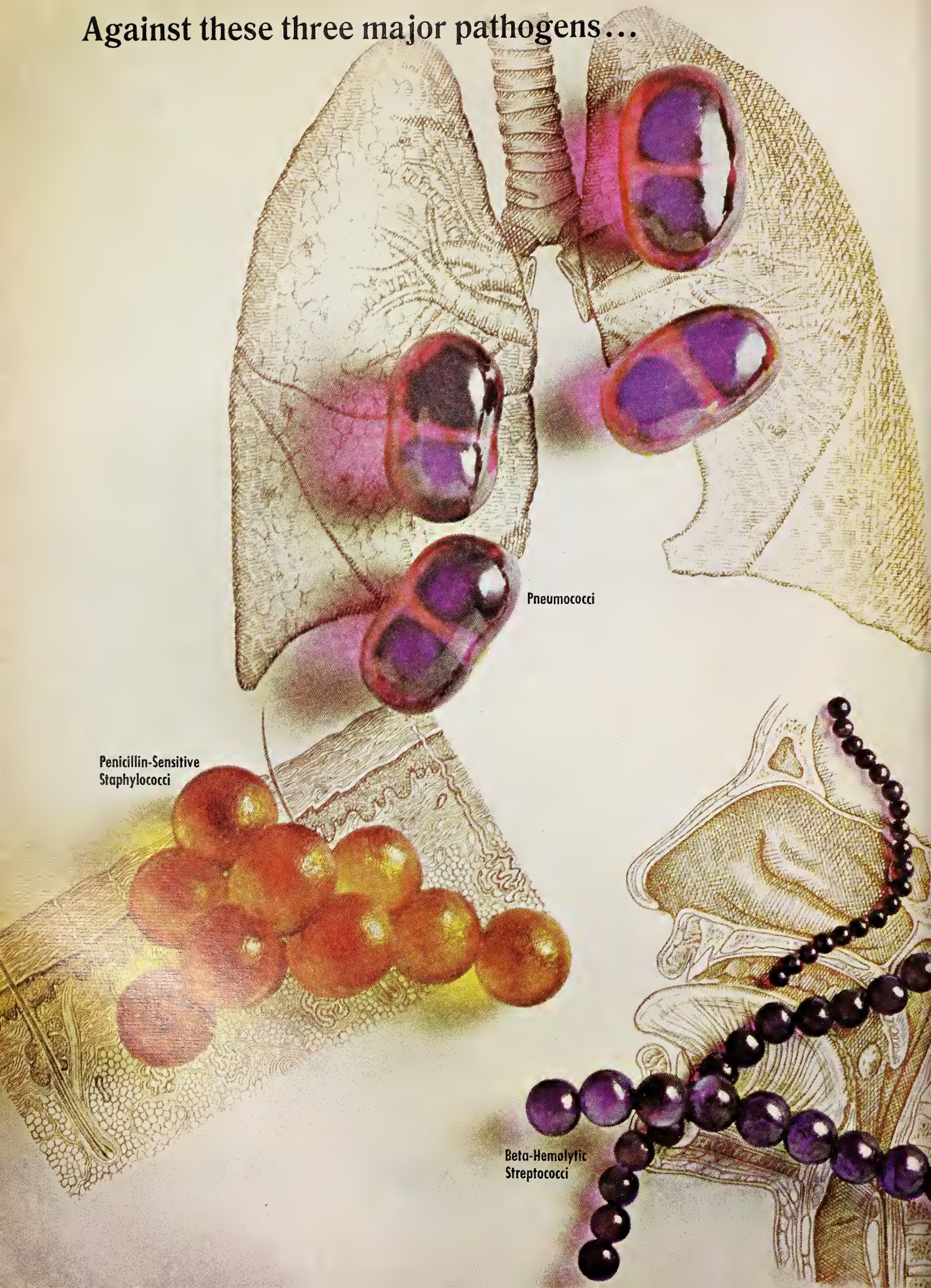
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PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. INDICATIONS: For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. DOSAGE: Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. ADVANTAGES: The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. CONTRAINDICATIONS: Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. PRECAUTIONS: Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. ADVERSE REACTIONS: As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. PACKAGE INFORMATION: Trisulfaminic Tablets: Supplied in bottles of 100 tablets. CAUTION: Federal law prohibits dispensing without prescription.

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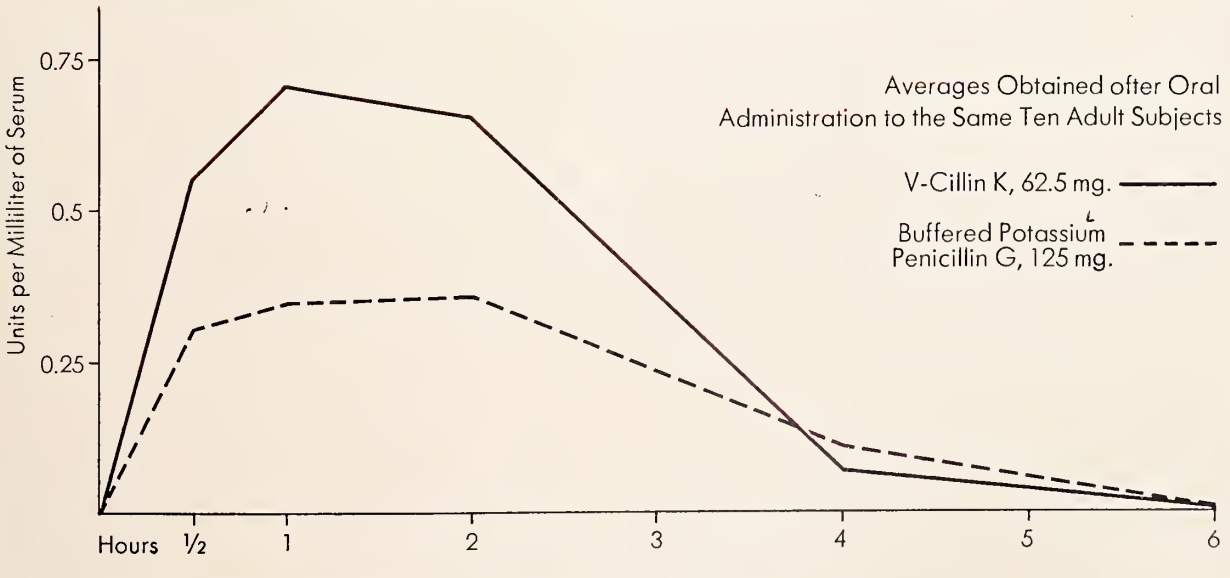
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Antibiatic	Stoph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxocillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269 1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

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Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are mu less common with administration of oral penicillin than with intramusc lar forms, skin rash, symptoms resembling those of serum sickness, other manifestations of penicillin allergy may occur. When penicillin administered, measures for treating anaphylaxis should be read available. Those include epinephrine, oxygen, and pressor drugs f relief of immediate allergic manifestations as well as antihistamin and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the ave growth of antibiotic-resistant organisms; in such a case, antibiotic a ministration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cil K, Pediatric, the usual dosage ranges from 125 mg. (200,000 unit three times a day to 500 mg. (800,000 units) every four hours. For i fants, the daily dosage may be 50 mg. per Kg. of body weight divide into three doses.

Beta-hemolytic streptococcus infections without associated bac remia may be treated with 200,000 to 400,000 units three times a da Therapy should be continued for a minimum of ten days to prevent d velopment of rheumatic fever and/or other serious complications. Do age for routine streptococcus prophylaxis in patients with a history rheumatic fever or congenital heart disease may be 200,000 units an or twice daily. When such patients undergo tonsillectomy, tooth extra tion, or other minor surgery, the prophylactic dose should be 500,0 units every six hours given two days prior to surgery and for two da postoperatively. If oral medication is not feasible on the day of s gery, parenteral therapy should be considered. Mild to moderate severe pneumococcus pneumonia has been treated effectively w 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be giv every six to eight hours in conjunction with indicated surgical proc dures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours three doses may be employed; in females, 500 mg. every four hours six doses are recommended. Patients with a suspected lesion of syphi should have a dark-field examination before receiving penicillin a monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,0 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) p 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

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Side Effects: There have been occasional reports of insomnia and nervousness. Rare instances of mouth dryness, nausea, blurring of vision, dizziness, constipation, and stomach pain have been noted.

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Cleveland Clinic Announces Postgraduate Courses for March

The Cleveland Clinic Educational Foundation will present six postgraduate courses next month.

"Advances in Urology" will be offered March 8 and 9; a postgraduate course in anesthesiology will be given March 15 and 16 and "Medical Progress and Its Relationship to Dentistry" is set for March 29 and 30.

Further information and detailed programs may be obtained by writing the Director of Education, the Cleveland Clinic Educational Foundation, 2020 E. 93rd St., Cleveland 44106.

Laryngology, Bronchoesophagology Course April 10 to 22 in Chicago

The Department of Otolaryngology of the Illinois Eye and Ear Infirmary and the College of Medicine of the University of Illinois at the Medical Center, Chicago, will conduct a postgraduate course in laryngology and bronchoesophagology from April 10 through 22, 1967.

This course is limited to 15 physicians and will be under the direction of Paul H. Holinger, M.D. It will be held largely at the new Illinois Eye and Ear Infirmary, 1855 W. Taylor St., Chicago, and will include visits to a number of Chicago hospitals. Instruction will be provided by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly to the Department of Otolaryngology, College of Medicine of the University of Illinois at the Medical Center, Postoffice Box 6998, Chicago, Illinois 60680.

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19th Annual Joseph and Samuel Freedman Lectures in Radiology

Dr. Richard H. Marshak, attending radiologist, Mt. Sinai Hospit New York City, will deliver the 19th annual Joseph and Samu Freedman Lectures in Diagnostic Radiology April 15 and 16, 19 at the University of Cincinnati College of Medicine.

Radiologists desiring to attend are requested to write Dr. Benjam Felson, department of radiology, Cincinnati General Hospital, f further details.

"Clinical Problems of the Newborn" Seminar Will be Held on April 13

The fifth annual seminar on "Clinical Problems of the Newbor will be held at Good Samaritan Hospital, Cincinnati, Ohio on Ap 13, 1967. The morning session will include case presentations a informal presentations.

Guest lecturers will include Dr. Ivan Diamond, Dr. Willi Cochrane and Dr. Joseph Dancis. There is no registration fee, b those interested in attending are requested to contact Charles Pfahler, M.D., Department of Pediatrics, Good Samaritan Hospit Cincinnati, Ohio 45220.

1967 National Medicolegal Symposium Will Meet March 9-11

The 1967 National Medicolegal Symposium jointly sponsored the American Bar Association and the American Medical Associati will meet at the Fountainebleau Hotel, Miami Beach, on March to 11.

A copy of the program and cards for registration and hotel r ervations may be obtained by writing the Medicolegal Symposium 535 N. Dearborn St., Chicago 60610.

"Setting Sights for Sight Saving" Theme for April 12-14 Conference

"Setting Sights for Sight Saving" is the theme of the 1967 Ann Conference of the National Society for the Prevention of Blindn to be held April 12 to 14, at the Christopher Inn, Columbus, Oh For further information write the Society at 16 E. 40th St., N York City 10016.

Postgraduate Institute of the Philadelphia County Medical Society

The Postgraduate Institute of the Philadelphia County Medi Society will be held at the Bellevue-Stratford Hotel in Philadelp on April 11 to 14.

Subjects to be covered are: Diseases of Stomach and Duodenu Genetically Determined Diseases; Newer Concepts in Hypertens Cardiovascular Disease; New Horizons in Thyroidology; Cereb vascular Disease; Recent Advances in Ophthalmologic Diagnos Physical Diagnosis from the Standpoint of the Skin; Diseases Coagulation and the Use of Anticoagulants; and Acute Pulmon Insufficiency.

The course is approved for credit by the American Academy General Practice. The fee is $50 for the entire course and $15 individual days. Send inquiries to 2100 Spring Garden St., Phila phia 19130.

County, District News

10th District

The new 1967 10th District Society officers are: Dr. R. J. Bills, president and . J. J. Reed, secretary.

13th District

Dr. Gordon Cook, South Bend, is the new esident of the 13th District County Medi- Society. Other new officers are: Drs. win Mueller, La Porte, vice president and an Hildebrand, South Bend, secretary-asurer.

Cass

The Cass County Medical Society has cted the following as its new officers: s. R. A. Eckert, president; C. M. Cobb, e president; E. L. TerBush, secretary-asurer; D. K. Winter, delegate and R. H. schmeyer, alternate. All of the new of-ers are from Logansport.

Clinton

Dr. Fred W. Flora is the new president the Clinton County Medical Society; Dr. ice A. Work, vice president and Dr. orge K. Hammersley, secretary-treasurer.

Dearborn-Ohio

New president of the Dearborn-Ohio unty Medical Society is Dr. Alfred K. odes, Lawrenceburg; secretary is Dr. ado S. Mauricio, Rising Sun, and retary-treasurer is Dr. J. Kenneth Jackson, rora.

Gibson

Dr. William E. Dye, Oakland City, is the ly elected president of the Gibson unty Medical Society. Other new officers are: Drs. Raymond G. Geick, Fort Branch, vice president and Dr. Roland E. Weitzel, Princeton, secretary-treasurer.

Hendricks

Officers of the Hendricks County Medical Society for 1967 will be: Drs. Eli Coats, Indianapolis, president; James Black, Brownsburg, vice president and Carl J. Heinlein, Danville, secretary-treasurer.

Lake

Dr. David B. Templin, Lowell, is the new president of the Lake County Medical Society. Assisting him will be Drs. S. W. Shapiro, president-elect and R. R. Barton, secretary-treasurer.

LaGrange

The 1967 officers of the LaGrange County Medical Society are: Drs. L. R. Studebaker, LaGrange, president; M. O. Mellinger, LaGrange, vice president and D. L. Mattox, Howe, secretary-treasurer.

LaPorte

The LaPorte County Medical Society has elected the following as its new officers: Drs. P. J. Pilecki, president; William Wolf, vice president and C. K. Liddell, secretary-treasurer.

Steuben

Dr. Robert F. Barton, Angola, is the new president of the Steuben County Medical Society; Dr. Mary Helen Cameron, Angola, the new vice president and Dr. Wayne Schrepferman, Hamilton, the new secretary-treasurer.

Shelby

The Shelby County Medical Society met Dec. 1 to hear an audio-digest tape on the "Use of Steroid Therapy" and attend to other business matters.

Sullivan

Dr. M. H. Bedwell, Sullivan, is the new president of the Sullivan County Medical Society. Other new officers are Drs. Glen McClure, Sullivan, vice president and J. S. Brown, Carlisle, secretary-treasurer.

Tipton

New president of the Tipton County Medical Society is Dr. Robert L. Haller, Kempton. Vice president is Dr. Harold L. Ericson, Windfall and secretary-treasurer is Dr. Albert E. Stouder, Kempton.

Tippecanoe

Newly elected officers of the Tippecanoe County Medical Society are: Drs. Philip Rothrock, president; Hugh Steele, vice president; B. Z. Klatch, treasurer and Lindley Wagner, secretary. All of the new officers are from Lafayette.

Vanderburgh

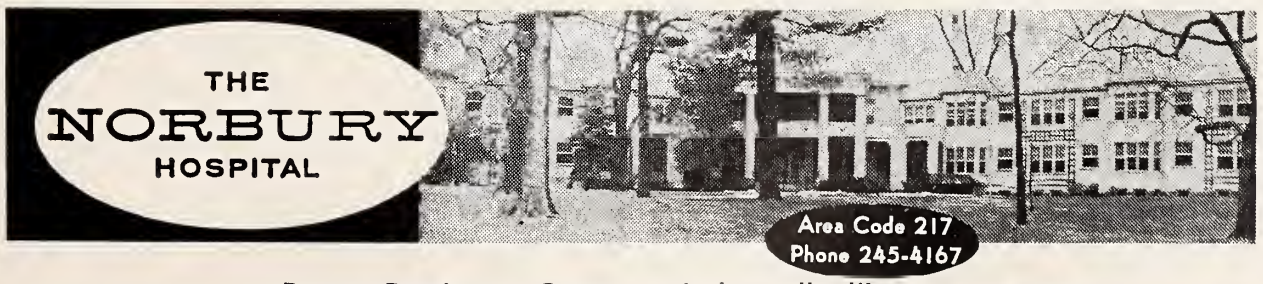
"How to Keep from Going Nuts in a Nutty World" was the subject of Dr. Henry M. Johnson, Indianapolis, when he spoke at the Dec. 13 meeting of the Vanderburgh County Medical Society.

Wayne-Union

Dr. Francis B. Warrick is the new president; Dr. John Stepleton, vice president; Dr. Joseph Zore, secretary and Dr. Alois E. Gibson, treasurer of the Wayne-Union County Medical Society for 1967.

White

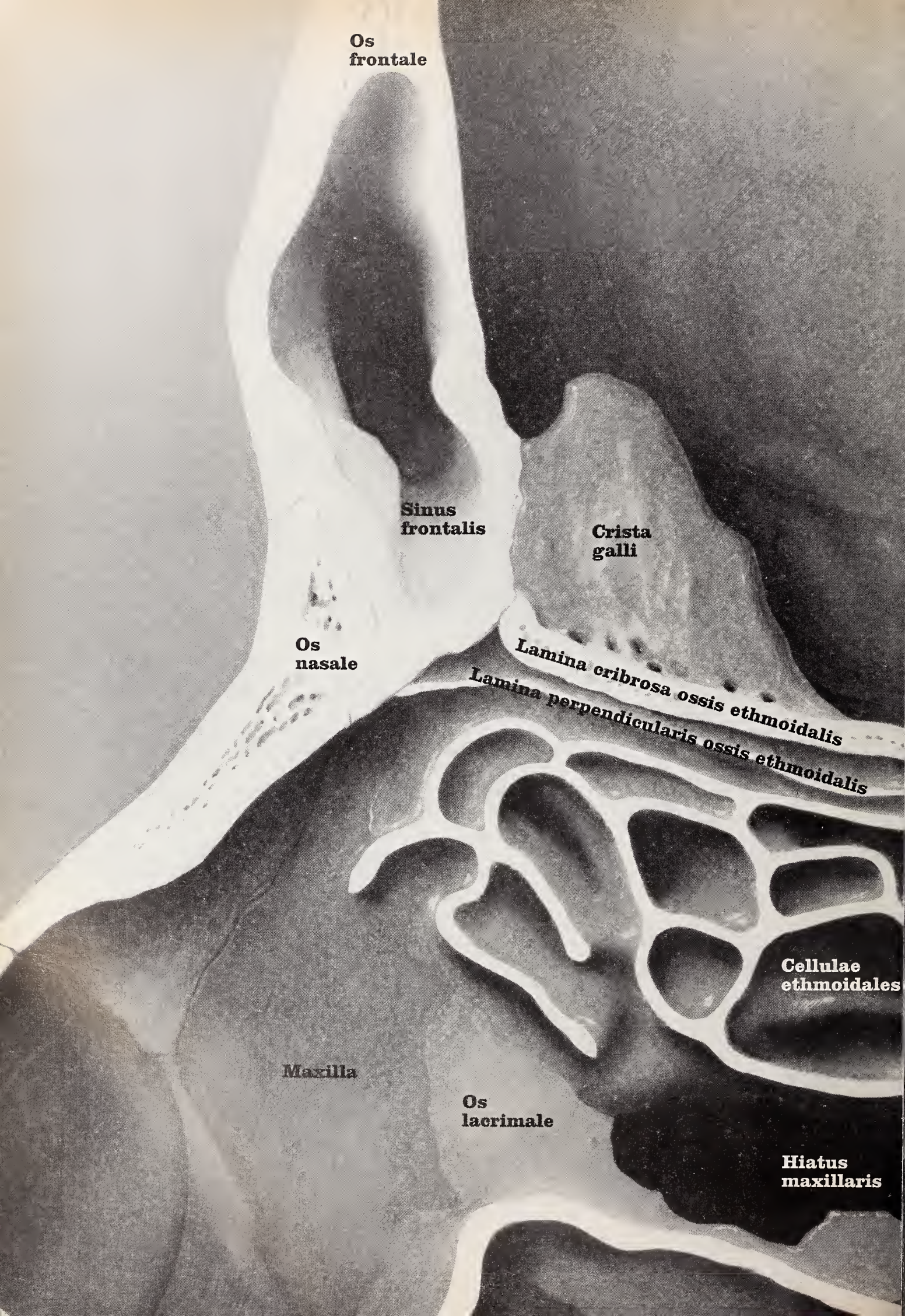
New officers of the White County Medical Society are: Drs. Nolan A. Hibner, president; David C. Beck, vice president and Max L. Fields, secretary-treasurer. ◄



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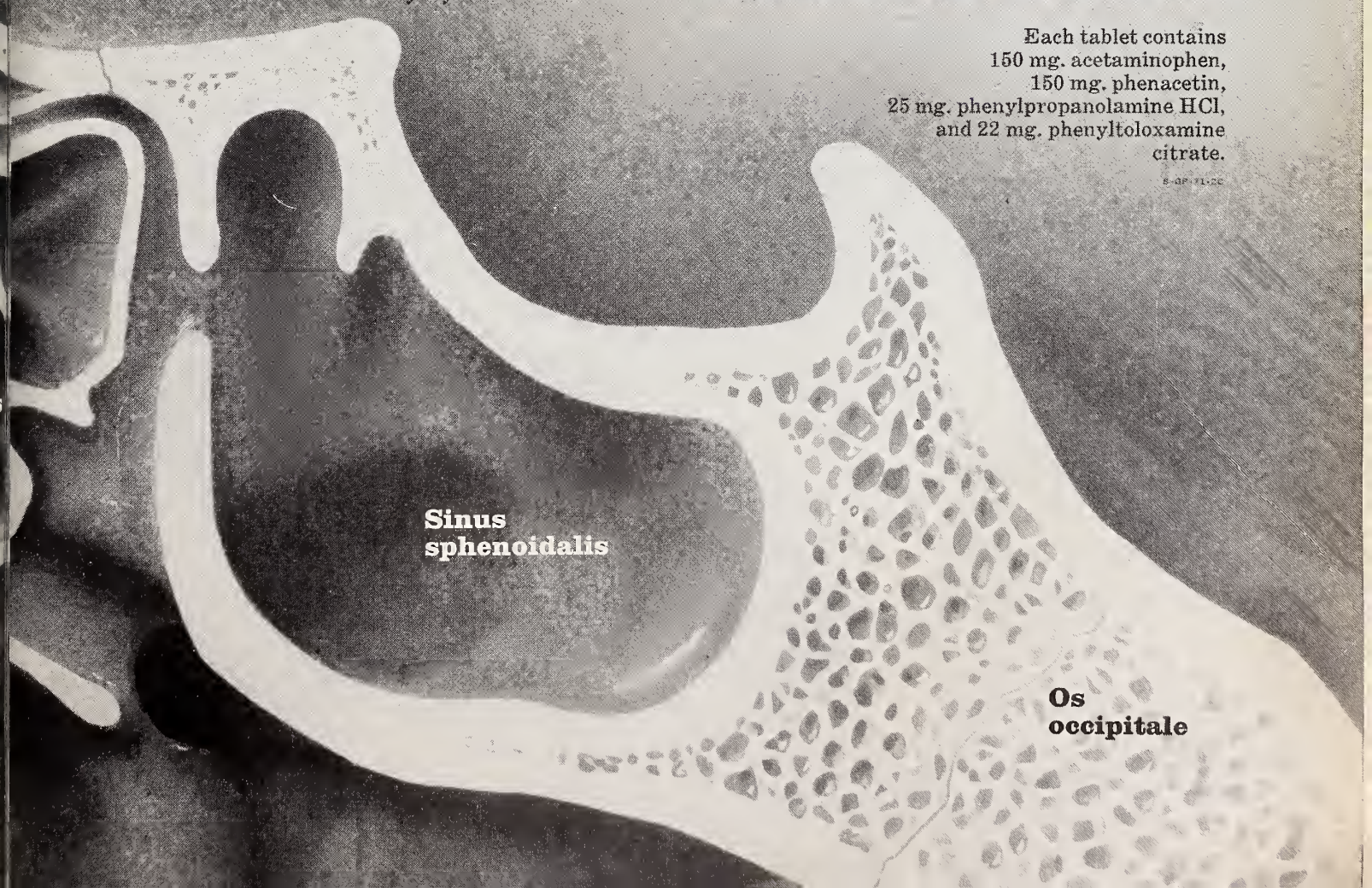
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Deaths

Ernest O. Asher, M.D.

Dr. Ernest O. Asher, 80, New Augusta physician for 50 years, died December 3 in his home.

Born at Gosport, Dr. Asher had lived in the Indianapolis area since 1912, the year he was graduated from the Indiana University School of Medicine. Dr. Asher, who was still active in practice, was a past president of the Marion County Tuberculosis Association; a Senior Member of ISMA; a member of the 50-Year Club and the Marion County Medical Society.

James W. Canaday, M.D.

Dr. James W. Canaday, who practiced medicine in Indianapolis from 1902 until his retirement in 1963, died December 15 at the age of 91.

Graduated from the old Indiana Medical College in 1901, Dr. Canaday served his internship at St. Vincent's Hospital. From 1943 to 1963, he was medical director for the Standard Life Insurance Co. of Indiana and was still a member of its board of directors. He was a member of the ISMA 50-Year Club, the Marion County Medical Society and a Senior Member of ISMA.

Ebbo H. Miller, M.D.

Dr. Ebbo H. Miller, 75, died Dec. 20 at Valparaiso where he had resided for 50 years.

Graduated from the Loyola University School of Medicine in 1922, Dr. Miller interned at Mayo Brothers in Rochester, Minn. He served as personnel officer of an Army detachment on the Valparaiso University campus during World War II and was chief of staff at the old Christian Hospital in Valparaiso. He was a Senior Member of ISMA and a member of the Porter County Medical Society.

Milo K. Miller, M.D.

Dr. Milo K. Miller, retired South Bend pediatrician, died December 16 in Marianna, Fla. He was 75.

Dr. Miller had been associated with the South Bend Clinic from 1920 until his retirement in 1965. During his medical career of 49 years, he served as chief of staff of the Northern Indiana Children's Hospital and as president of the medical staff of the Children's Dispensary. He was graduated from Johns Hopkins University Medical School in 1916 and was a member of the St. Joseph County Medical Society.

Louis H. Osterman, M.D.

Dr. Louis H. Osterman, former Seymour city health officer and a physician there for 34 years, died December 12 at the age of 72.

Dr. Osterman, who practiced in Seymour from 1927 until he retired in 1961, formerly practiced in Fort Wayne. Graduated from the I.U. School of Medicine in 1925, he was an Army veteran of World War I, a Senior Member of ISMA and a member of the Jackson-Jennings County Medical Society.

Herbert M. Rhorer, M.D.

Dr. Herbert M. Rhorer, 75, died Decemb 25 in his winter home in Sarasota, Fla.

A Kokomo surgeon, Dr. Rhorer retired 1961 after 40 years practice there. He w a past president of the Howard Cou Medical Society, a veteran of World Wa and a Senior Member of ISMA. While Kokomo, he was on the Indiana State Bo of Education and was a member of the bo of trustees for both the Kokomo sch system and DePauw University. Dr. Rho was graduated from the Northwestern Sch of Medicine in 1920.

William M. Smith, M.D.

Dr. William M. Smith, 71, resident phy cian for the past 14 years at Beatty Memor Hospital, died December 23 at LaPorte.

Member of the LaPorte County Medic Society, Dr. Smith was a U. S. Navy veter of World War I and was graduated fr the Northwestern University School of Me cine in 1926.

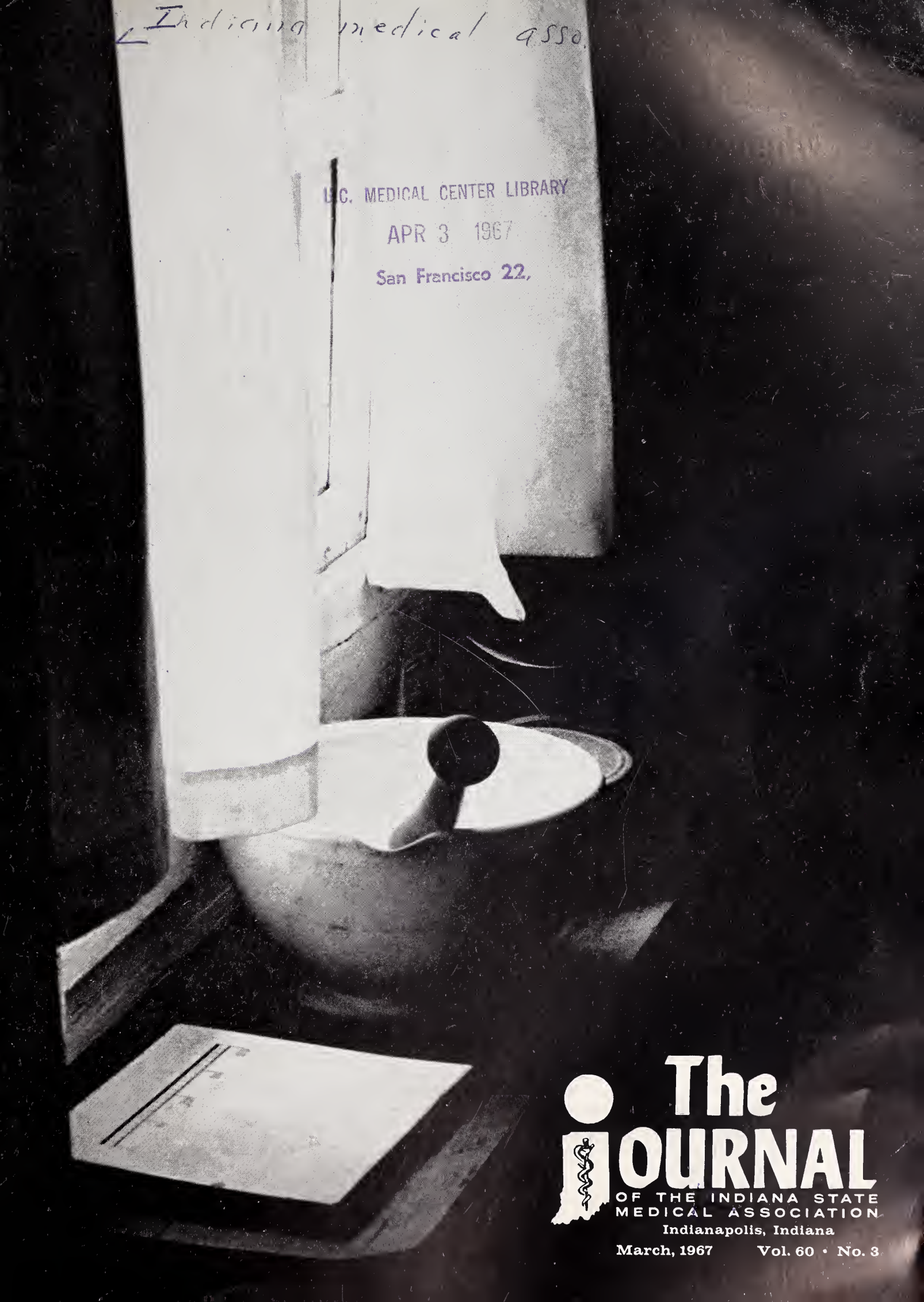
Daniel S. Strong, M.D.

Dr. Daniel S. Strong, practicing physici in the Terre Haute area for some 51 yea died December 7 at the age of 88.

Retired for several years, Dr. Strong w graduated from the Eclectic Medical Coll in Cincinnati in 1908. He was a veteran World War I, a Senior Member of ISM a member of the 50-Year Club and the V County Medical Society.

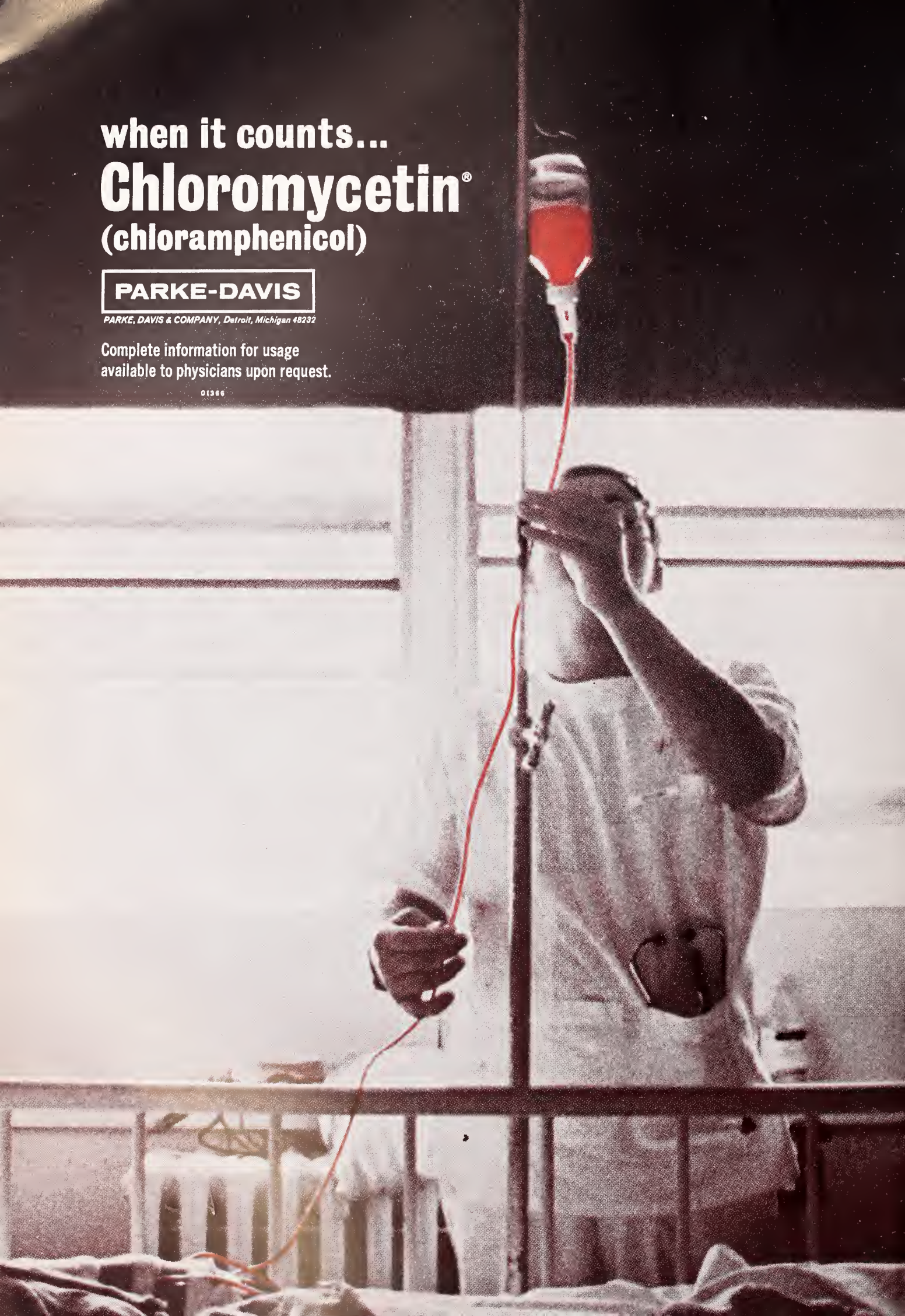
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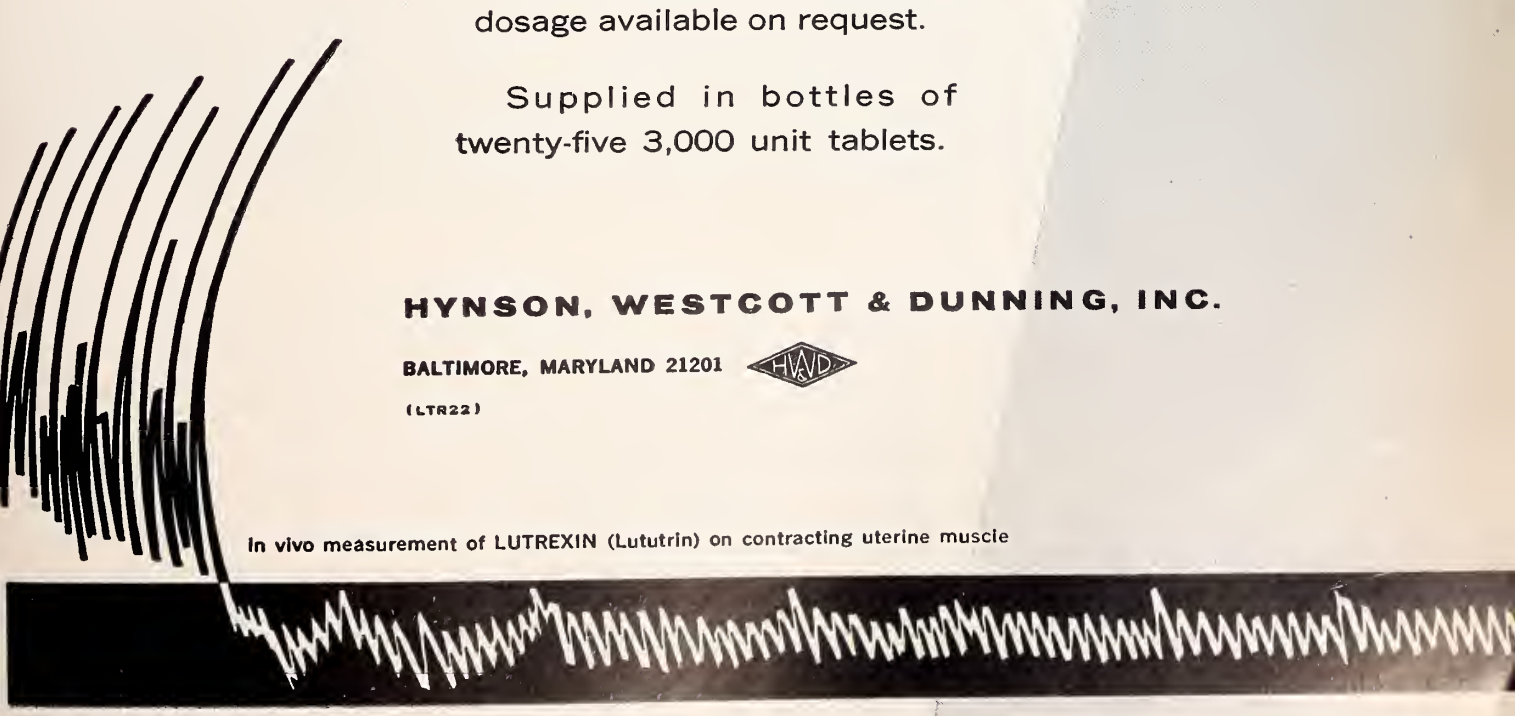
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Communicotions deoling wi editoriol motter should be sent Fronk B. Ramsey, M.D., Editor, 18 North Illinois Street, Indionapo 46202. All other communic tions should be sent to THE JOU NAL of the Indiona State Medic Association, 3935 N. Meridi Indianopolis 46208.

Advertising rotes will be fu nished on request. Copy must received by the 5th of the mon preceding month of issue. (Scie tific monuscripts must be receiv ot leost two weeks eorlier geored for o specific issue.)

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Entered os second closs matt January 25, 1933, ot the Postoffi at Indianopolis, Indiono. Copyrig 1967 by the Indiono State Medic Association. Published monthly 3935 N. Meridion, Indionopo 46208.

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10—Lowell H. Steen, Whiting (Chairman)	Oct. 1968
11—Lowell Hillis, Logansport	Oct. 1969
12—Milton F. Popp, Fort Wayne	Oct. 1967
13—Otis R. Bowen, Bremen	Oct. 1968

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2—	
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7—John O. Butler, Indianapolis	1969
8—Paul Sparks, Winchester	1967
9—Clarence G. Kern, Lebanon	Fall, 1968
10—Herman Wing, Gary	1969
11—James A. Harshman, Kokomo	1969
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4.	Harold W. Richmond, Columbus	David L. Adler, Columbus	Columbus, May 17, 1967
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6.	J. J. Farrell, Jr., Greenfield	Stephen D. Smith, Knightstown	
7.	Jay Reese, Martinsville	James H. Gosman, Indianapolis	
8.	Donald E. Spahr, Portland	Joseph F. Vormohr, Portland	Portland, June 7, 1967
9.	Harry T. Stout, Frankfort	Earl K. Williams, Frankfort	May 18, 1967
10.	R. James Bills, Gary	John J. Reed, Hobart	Whiting, May 3, 1967
11.	Joseph Bean, Logansport	Fred Poehler, LaFountain	Logansport, Sept. 13, 1967
12.	Warren L. Niccum, Columbia City	Kenneth F. Isenogle, Fort Wayne	Fort Wayne, May 17, 1967
13.	Gordon Cook, South Bend	John Hildebrand, South Bend	

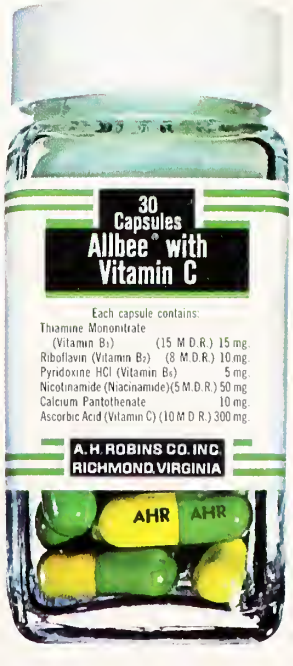
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INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

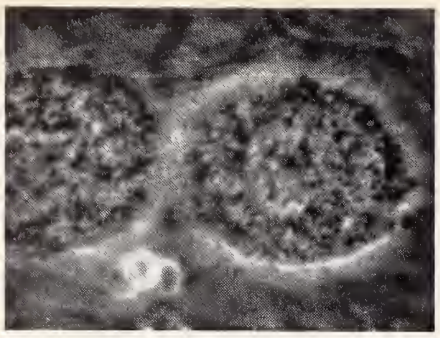


Visual evidence of how corticosteroids influence the inflammatory reaction

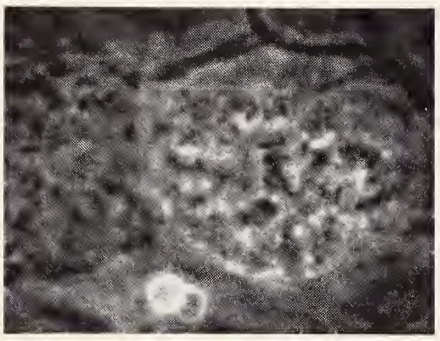
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



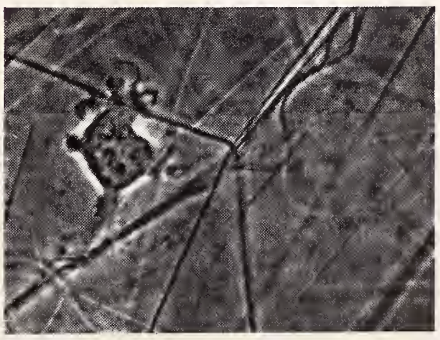
Phase-contrast microscopy showing mast cell before injury.



Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

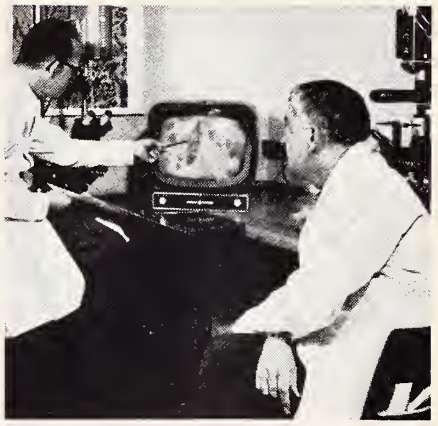
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid —Synalar (fluocinolone acetonide)— the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



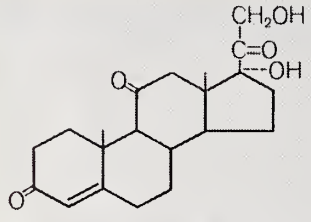
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses,* a film based on this study, is now available from your Syntex representative.

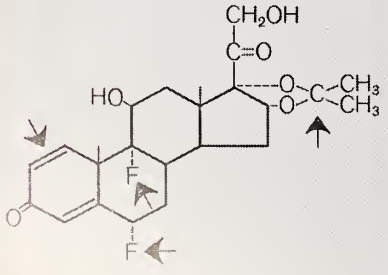
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

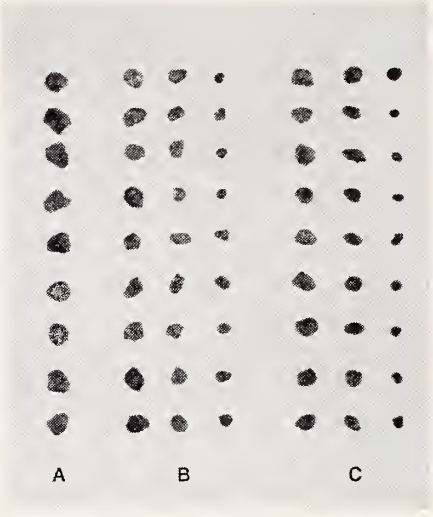


Fluocinolone Acetonide (Synalar)

- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from

SYNTEX LABORATORIES INC., PALO ALTO, CALIF.

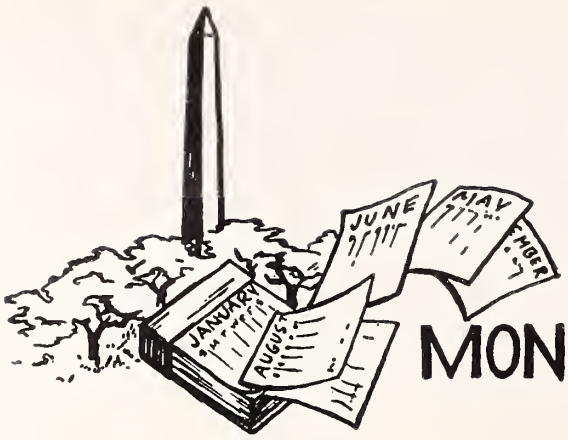
For inflammatory dermatoses... by any measure a topical corticosteroid of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards



This summary of what is happening in Washington is prepared by AMA's Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D.C.—The Johnson administration's health legislation program this year includes proposals to expand medicare and limit medicaid, and more money is being requested for most federal activities in the health field.

PRESIDENT JOHNSON also has asked Congress for anti-air pollution legislation and stricter anti-water measures.

THE PRESIDENT termed medicare "an unqualified success," but added "there are improvements which can be made and shortcomings which need prompt attention." He proposed that the 1.5 million disabled persons receiving other Social Security and railroad retirement benefits als be included under medicare. He said "certain types of podiatry" should be included in medicare benefits. He further directed the Secretary of Health, Education and Welfare "to undertake immediatel a comprehensive study of the problems of including drugs under medicare."

JOHNSON noted that only 415,000, less than half of the 850,000 total, of nursing home beds in the nation met federal standards and that only 3,000 of the total of 20,000 nursing homes had qualified under medicare.

TO MOVE toward correcting this situation, he wants more money for more healt facilities and better health care institutions for the aged.

THE PRESIDENT called for extension of existing legislation to improve state and local health planning for the elderly and to launch special pilot projects to bring comprehensive medical and rehabilitation services to the aged.

AS FOR limiting medicaid (Title XIX of Social Security), Johnson said that a state should not be permitted to have its income ceilings for medical assistance more than 50% higher than the level set for welfare assistance. The medicaid program, which now gives states carte blanche as to income standards, became the subject of widespread controversy after New York set an eligibility standard of $6,000 net income for a family of four.

TWENTY-EIGHT STATES and jurisdictions had medicaid programs by Jan. 1, 1967, and it is estimated that 30 will have them by July 1, 1967, and 48 by July, 1968. Title XIX programs replace the medical vendor payment part of existing federal-state welfare programs, including Kerr-Mills.

HE ADMINISTRATION'S fiscal 1968 budget calls for general fund expenditures of $11.7 billion for carrying out existing and proposed new programs of the Department of Health, Education and Welfare (HEW). This is an increase of $1.0 billion over current year spending. In addition to the general fund outlays on behalf of HEW, the budget forecasts benefit payment and administrative expenditures in 1968 from Social Security trust funds in the amount of $31.0 billion, an increase of $5.5 billion over 1967.

HEALTH program highlights of the HEW budget include:

—A five percent increase, to $1.45 billion, for medical research.

	(Dollars in Millions)	
	1967	1968
—Food and Drug Administration	$ 64	$ 68

THE $4 MILLION increase will be used to: (1) expedite the review and surveillance of new drugs for safety and efficacy, (2) expand extramural research into the side-effects of oral contraceptives, (3) expand the program established under last year's Drug Abuse Control Amendments, and (4) carry out the new Fair Packaging and Labelling Act. The 1968 budget will also emphasize regulation of barbiturates, amphetamines, and other drugs affecting the central nervous system, and a step-up in FDA's food standards program.

—Regional Medical Programs-$16 million.

IT IS EXPECTED that grants will be awarded to regional groups in 1968 primarily to support a rapid expansion throughout the nation of operational activities begun during 1967, and an expansion and supplementation of planning activities begun in 1966. Emphasis will be on regional planning and coordination of medical resources, continuing education for doctors and other medical personnel, and the rapid distribution of new knowledge and techniques.

—The total Children's Bureau budget request for fiscal year 1968 is almost $246 million, an increase of about five percent or about $11 million over 1967. The largest share of the approximately $11 million increase is $5 million additional for special project grants for health of school and pre-school children.

ARMY AND NAVY TO DRAFT MORE DOCTORS

THE ARMY and Navy will draft 2,118 medical doctors and 111 osteopaths starting in July.

THE DEFENSE Department said Selective Service was requested to provide the doctors because an insufficient number had volunteered to be able to replace men leaving service after two years' active duty. The Air Force is meeting its need and will not participate in the summer draft call.

OF THE 2,229 doctors to be drafted, 1,537 will go on duty in the Army and 692 in the Navy.

LAST APRIL, the Armed Forces issued new regulations under which doctors of osteopathy who volunteered for service could be commissioned. The Pentagon said fewer than a dozen had volunteered, however.

NEW CLINICAL STUDIES WITH DMSO

NEW CLINICAL studies are being permitted with DMSO (dimethyl sulfoxide) under

guidelines established to provide the maximum protection possible for patients receiving the drug.

DR. JAMES L. GODDARD, Commissioner of Food and Drugs said: "A COMPREHENSIVE evaluation of all data available to us on DMSO has been completed. Indications that the drug may be of value in treating certain conditions justify further clinical investigations."

HE WARNED, however, that these trials must be carefully planned and controlled. "SERIOUS toxic signs are observed in animals used in DMSO experiments," Goddard said. "Since these effects vary considerably among different species, it is possible that the drug could be less toxic in humans. But this cannot be taken for granted."

OCCURRENCES of eye changes in DMSO-treated animals led the Food and Drug Administration to suspend clinical trials with the drug a year ago. ◄

About Our Cover

The award-winning silhouette on this month's cover is entitled "Doctor's Office."

The picture won a first place in the black and white category in a local contest sponsored by *The Indianapolis News* and Eastman Kodak Co. It was taken by Jerry R. Robinson, a former Indianapolis resident who became interested in photography in 1961.

The picture was taken in New Salem, Illinois in the restored village where Abraham Lincoln grew up. The office pictured is in a small cabin owned by the village doctor, Dr. John Allen.

Dr. Allen went to New Salem in 1830. In 1833, he built a three-room log residence and the next year married Mary E. Moore. Because of his extensive practice, he became one of New Salem's most prosperous citizens. He saw his patients in the small room on this month's cover, and, from the looks of his tools on display, indulged in a little "blood letting" on the side. There are two doctor's offices in Lincoln's New Salem State Park and herb gardens grow again at each of them.

Infinite labor and endless research characterize the re-creation of this village where young Lincoln clerked in a store, chopped wood, enlisted in the Black Hawk War, served as postmaster, deputy surveyor and legislator, failed in business and met Ann Rutledge.

Our thanks to Mr. Robinson for making this month's cover available to us.—J.F.S.

Annual Meeting Dates of Professional Medical and Allied Organizations

AMERICAN MEDICAL ASSOCIATION ANNUAL CONVENTION
Date June 18-22, 1967
Place Atlantic City, N.J.

NORTHERN INDIANA PSYCHIATRIC SOCIETY
Date Fourth Wednesday of every month, September through June
Place For location and program, inquire Beatty Memorial Hospital, Westville

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of the month, October through May, excluding December
Place The Athenaeum, Indianapolis

INDIANA STATE DENTAL ASSOCIATION
Date May 14-17, 1967
Place Claypool Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Annual Slide Seminar:
Date April 8, 1967
Place Veterans Administration Hospital, Indianapolis

Medical Microbiology Seminar:
Date May 13-14, 1967
Place Rice Auditorium, Indiana State Board of Health, Indianapolis

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 12-14, 1967
Place Stouffer Inn, Indianapolis

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date April 7-8, 1967
Place Morris Inn, Notre Dame University, South Bend

INDIANA PHARMACEUTICAL ASSOCIATION
Date July 18-20, 1967
Place French Lick Sheraton Hotel, French Lick

INDIANA ACADEMY OF GENERAL PRACTICE
Date May 3-4, 1967
Place Murat Temple, Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date Nov. 1-3, 1967
Place French Lick-Sheraton Hotel, French Lick

BONE AND JOINT CLUB
Date May 3, 1967
Place The Athenaeum, Indianapolis

INDIANA PUBLIC HEALTH ASSOCIATION
Date April 25-26, 1967
Place Indianapolis

INDIANA STATE MEDICAL ASSOCIATION CONVENTION
Date October 9-12, 1967
Place Indianapolis

INDIANA STATE ASSOCIATION OF MEDICAL ASSISTANTS
Date April 28-30, 1967
Place Van Orman-Roberts Hotel, Muncie

INDIANA ROENTGEN SOCIETY
Date May 7, 1967
Place Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Date March 22, 1967
Place Howard Johnson's, 501 W. Washington St., Indianapolis

INDIANA STATE NURSES ASSOCIATION
Date Oct. 12-14, 1967
Place French Lick-Sheraton Hotel, French Lick

INDIANA SOCIETY OF ANESTHESIOLOGISTS
Date May 13, 1967
Place Marott Hotel, Indianapolis

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date June 3, 1967
Place Hotel VanOrmand, Fort Wayne



when he just can't sleep

Tuinal®

Sodium Amobarbital and Sodium Secobarbital

(One-Half Sodium Amobarbital and One-Half Sodium Secobarbital)



Tuinal helps wakeful patients fall asleep fast, stay asleep all night.

Indications: Tuinal, comprised of equal parts of Seconal® Sodium (sodium secobarbital, Lilly) and Amytal® Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Supplied: ¾, 1½, and 3-grain Pulvules®.

Additional information available to physicians upon request.
Eli Lilly and Company • Indianapolis, Indiana 46206

Lilly

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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—January, 1967

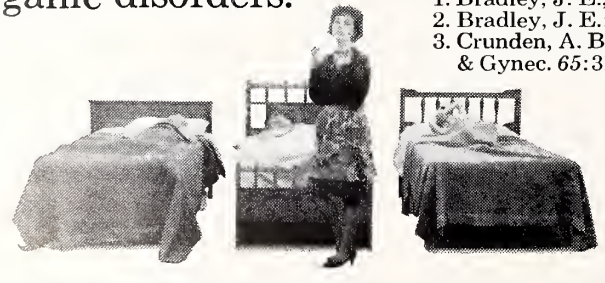
Disease	Jan. 1967	Dec. 1966	Nov. 1966	Jan. 1966	Jan. 1965
Animal Bites	351	495	599	288	283
Chickenpox	442	350	224	651	890
Conjunctivitis	68	63	36	93	139
Diphtheria	0	0	0	0	1
Dysentery, Unspecified	70	30	43	100	42
Gonorrhea	336	579	322	377	319
Impetigo	90	110	118	70	103
Infectious Hepatitis	28	43	46	39	29
Infectious Mononucleosis	52	53	49	62	40
Influenza	654	644	514	1774	612
Measles (Rubeola-Rubella)	134	92	94	469	209
Meningitis, Meningococcal	3	4	3	4	5
Meningitis, Other	2	4	3	6	3
Mumps	431	306	359	388	324
Pertussis (whooping cough)	14	17	13	0	28
Pneumonia	237	240	184	289	291
Poliomyelitis	0	1	0	0	0
Streptococcal Infection	596	472	390	768	577
Syphilis					
Primary & Secondary	5	3	6	6	3
All Other Syphilis	60	95	66	86	90
Tinea Capitis	10	15	18	29	30
Tuberculosis (Active)	81	128	82	93	86



Togetherness....

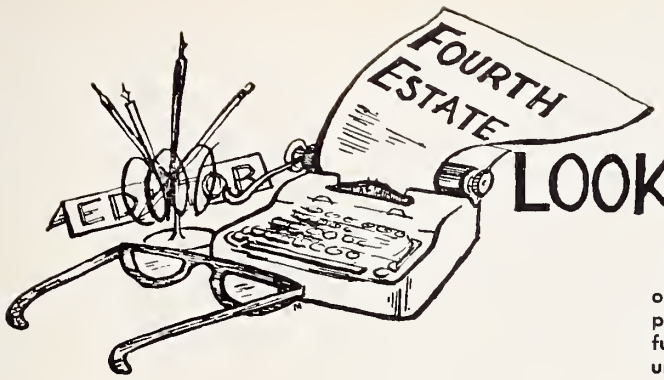
...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity[1] or side effects[2,3] and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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Fort Washington, Pa.

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phosphorated carbohydrate solution
emesis control



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

How Medicare "Works"

When the Medicare program was launched last year, critics feared it might encourage longer stays in hospitals while adding to hospital costs for non-Medicare patients.

An article by *The News* reporter Charles McKinney last week suggests those fears have been borne out in Indiana.

Medicare patients, McKinney reported, "are adding to an already critical bed shortage in Indiana hospitals by staying two to four days longer than they would if they had to pay their bills themselves." As a result, he wrote, the lists of people awaiting admission to Indiana hospitals for treatment are growing longer.

Since Medicare patients do not pay their own bills, says Elton TeKolste, executive director of the Indiana Hospital Association, it is "difficult to encourage them" to leave hospitals once their treatment is concluded.

Another result, in addition to the longer waiting lists, is that hospital costs for other patients have been raised. Such costs are rising also, McKinney noted, because the method used by the Federal program to reimburse hospitals is inadequate.

Several months ago, non-Medicare patients were paying about $2 more than previously because of the inadequacy of the Medicare reimbursement formula. Now, reported McKinney, "since Medicare patients are staying longer in hospitals and, consequently, the number of other patients is decreasing, the cost to each non-Medicare patient is going up again. . . ."

Supporters of the Medicare bill were quick to dismiss fears that such things might occur. Yet they are happening right here in Indiana.

Add to all of this the increased Social Security taxes everyone must pay to support Medicare, and it appears the program may work more hardships than it seeks to eliminate.—*The Indianapolis News*, Jan. 19, 1967.

Wise Decision By Crawford County Citizens Satisfying

Friends in neighboring counties are happy about the fact that Crawford county has a new medical clinic, and a new physician.

The decision to build a modern medical clinic and to use it as an incentive toward securing a much-needed doctor has paid off well for Crawford county.

Crawford county citizens should be commended and congratulated on their good work in raising the funds needed for matching the Sears Roebuck Foundation funds for the building of the clinic.

The clinic has far-reaching effects. A survey last year showed that an average of 52 patients per day had to travel out of the county for medical attention, equal to a daily round trip of 2,173 miles. Those patients traveled a collective 525,000 miles annually. Their total expenditures amounted to $91,975.

Important phase of the project was contacting Dr. Senen J. Encinas, as a result of organizing and conducting a systematic search for a physician who might be interested in making use of the clinic. The search bore fruit when English Civic Club members contacted Dr. Encinas, then a staff physician at St. Francis Hospital in Cincinnati.

Dr. Encinas and his wife, who is a registered nurse, and their son, Jimmy, moved to English last week.

Dedication of the clinic Sunday afternoon was a satisfying occasion. Citizens of Crawford county who contributed time, work, cash and direction to the project may well take justifiable pride in the accomplishment. The decision to go ahead and build a clinic, even though the question as to whether or not a doctor might be found to man it, was a wise one.—*Corydon Democrat*, Dec. 21, 1966.

Medical Progress In 1966

Hopefully, we can look forward to a year of good health in 1967.

As the American Medical Association points out, the past year was one of encouraging developments that may help ensure many of us a longer, more comfortable life.

Here's some of the medical progress of 1966:

—The first successful implantation of artificial devices, popularly but incorrectly called "artificial hearts," into the chests of human beings to aid failing hearts.

—A drug that preliminary investigation indicated may improve memory.

—A dignified scientific study that gives a clearer understanding of the mysteries of human sexual response.

—Adaptation and improvement of Russian-built artificial limbs by Cana-

Continued





Posed by professional model

I'm supposed to get up and do things?

With my heart?

It's entirely natural—and may even be desirable—for the cardiovascular patient to be somewhat anxious about himself.

But when anxiety leads to unreasonable self-imposed limitations and restrictions . . . when it aggravates cardiovascular symptoms . . . when it interferes with restful sleep, measures to help alleviate the anxiety are probably in order.

One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

American Hospital Formulary Service Category No. 28:16.08

A quality controlled product of
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to help relieve anxiety and tension occurring alone or secondary to organic disease

Equanil® (meprobamate)

Wyeth® SERVICE TO MEDICINE

dian physicians. These devices derive motive power from the electric potential of muscle, eliminating the need for straps and springs.

The past year saw many American physicians volunteer their skills to help fill the immense need of the South Vietnamese people for medical care. The program through which they volunteer for 60 days of service in Vietnamese hospitals is known as AMA Volunteer Physicians for Viet Nam.

This past year was one in which American medicine made solid proposals for the kind of medical education required to provide communities with family physicians—a new kind of physician, broadly educated in continuous, comprehensive health care.

Finally, 1966 might be characterized as the year of vaccines. A mumps vaccine proved nearly 100% effective in clinical trials. A prophylactic vaccine showed nearly total effectiveness in protecting unborn infants against the deadly "Rh factor" in some mothers' blood. Work continued on German measles vaccines, with great success reported in human trials. Wide use of existing vaccines was urged in a campaign to stamp out measles.

We are not yet at the end of the road to perfect health. Medicine makes no promise that we will ever get there — certainly not in the near future. Physicians still lose battles against such old killers as heart disease, stroke and cancer.

But our prospects continue to improve for a rich, full life and a meaningful old age. One of the people we can thank for this is the American doctor.—*Tell City News*, Dec. 29, 1966.

Is There a Doctor in the State?

Ball State University at Muncie has mounted an impressive drive and been recommended as the site for a second medical school in Indiana. Ball State's latest publicity sheet on the problems of the Hoosier state's medical needs contains some interesting statistics.

For instance, although the national ratio of physicians-to-population has climbed gradually in the last few years, Indiana's ratio has declined radically.

The national ratio is one doctor for each 700 people. Indiana had this ratio back in 1920. But in the past 45 years the ratio has been increasing until in 1965 there was one doctor for every 1,011 people in the state.

Indiana has more lawyers to serve its people than it does doctors. There is one attorney for each 921 people.

Indiana ranks 15th among the nation's states in wealth. But we are poor in doctors. Regardless of whether or not any medical school will help solve the problem, there is a problem.

The fact of the matter is that Indiana — and the rest of the country for that matter — needs more doctors. And in particular, the general practitioner is needed.

There are many medical students who want to become specialists in certain fields or enter medical research, but not a large enough number of the students want to become family doctors.

This is beeause the family doctor has neither the "glamor" or the monetary reward of a specialist. Chances are that the family doctor will have to work harder and longer, receive less money, and be almost looked down upon by other doctors.—*Marion Leader-Tribune*, Dec. 15, 1966.

Progress For Peru

Thanks to three local physicians, both Peru and the medical community got a taste of progress this week that hopefully will be of long-term benefit to city, patients and doctors alike.

Drs. H. E. Rendel, L. L. Hill and P. W. Snyder have moved their practices to a modern, attractive, comfortable and practical building at 302 N. Duke St. As is the case with most physicians in the community, they have been practicing in an old building that was both unattractive from a patient's standpoint and impractical from the doctor's standpoint.

As both doctors and patients recognize, Peru has a problem from a medical point of view: There just aren't enough doctors — both general practitioners and specialists — to adequately serve the population.

The new medical office building won't, of course, solve this problem by itself. But the three physicians, who are practicing as individuals and not as partners or as an incorporated group, have acquired land around their new building to permit expansion of it.

Couple the presence of good facilities with the need of the community for more physicians, and add continuing effort by both the doctors and members of the community to attract more physicians here, and perhaps our medical picture will brighten somewhat.

It's an idea worth thinking about and acting on.—*Peru Tribune*, Dec. 8, 1966.

Group Health Advances

Organized medicine, for the most part, has a splendid record of elevating the standards of medical practice and a poor record with regard to medical economics. This is not merely a comment on the doctors' generally negative attitude toward the Medicare program, though this has been the focal point of attention in recent times.

The American Medical Association, for instance, opposed health insurance at first. Not until it became clear that health insurance was here to stay did organized medicine acknowledge its value. The AMA and its affiliates also have fought against group health plans, even though these have generally played an important role in improving health care for those who participate.

The sticking point, as one might expect, is economics. Organized medicine does not like the group health plans' system of paying doctors a salary instead of permitting them to charge patients on a fee-for-service basis. Medical societies have fought this by refusing to grant membership to doctors who practice in group health plans.

Hospitals have refused to accept such doctors on their staffs.

Despite such opposition, the group health plans are making progress. One nudge in this direction has been provided by arbitration and legal proceedings at Bellaire, Ohio, and in Wheeling, W. Va., across the Ohio River. In one case, an arbitrator ruled that a county medical society must accept two doctors apparently kept out because they practiced in a group health plan. In another a federal judge held that, under the 14th Amendment, hospitals getting federal aid cannot discriminate against doctors on the basis of participation in a group health plan.

The struggle is not won, but important precedents have now been established. Organized medicine's fight against group health plans is clearly a losing battle.—*Evansville Courier*, Jan. 5, 1967.

To Keep More Doctors

The Indiana General Assembly will begin considering the options available to meet the crisis that exists within this state's system of medical education.

We hope that the legislators will remember through the debates that medical education is a system, not an arrangement of independent parts that lend themselves to easy alterations.

The crisis in the system now is that it does not produce enough physicians.

The obvious solution is to establish a second state medical school. There are several competitors for this apparent prize and each has a bloc of allies in the legislature. But this obvious solution is based upon a misunderstanding of the medical education system.

The most immediate cause of the state's shortage of physicians is that our medical education system now does not train adequate numbers of interns and residents.

This part of the system is inadequate even for the graduating classes of the state's only medical school, the Indiana University School of Medicine. Many of these graduates now leave the state to complete their formal educations as interns and residents and too many never return. Adding the graduates of a second medical school would simply add overload to this part of the system.

A second state medical school would thus be the most inefficient, most costly option in any effort to produce more practicing physicians.

We thus favor the Indiana University Plan for medical education and we urge the legislators to give it their support and approval. The Indiana Plan has been explained in length and detail in previous stories in *The Star*. It is sufficient to note that its principal thrust is to establish excellent programs for interns and residents at principal hospitals throughout the state.

It would also strengthen and give coherence to that part of the medical education system devoted to the continuing education of physicians.

(We note as well that the Indiana Plan would create in several communities the necessary foundation upon which a strong medical school ultimately could be built.)

The Indiana Plan also seems to be based upon the trends of development in medical education and the organization of medical practice. It would, for example, greatly strengthen the hospitals which increasingly are becoming the centers of organization in medical practice. It would finally integrate the resources of the medical school within the entire system of medical education and practice. This, too, is good.

The Indiana Plan offers the fastest, most economical solution to the cause for the debates, the shortage of physicians, by focusing its thrust at the principal weakness of the present system—the education of interns and residents. The legislators thus have a double opportunity to choose a plan which will both ease the crisis within the system of medical education and simultaneously make this system the most advanced and effective in the nation—*The Indianapolis Star*, Jan. 8, 1967.

A Money Saver

The operation of a hospital in these days of Medicare and widespread use of hospitalization insurance is accompanied by an enormous amount of paper work which consumes much time and effort.

Three Indianapolis hospitals, Methodist, St. Francis and St. Vincent's, and the Crossroads Rehabilitation Center have gone a long way toward solving the problem by sharing in a centralized computer by which the job can be done much more rapidly and accurately. Processing will begin in April.

It is estimated that the computer can do the accounting chores two-and-a-half times more cheaply than can the present method. The Indianapolis Hospital Development Association's computer committee anticipates eventual savings of millions of dollars.

Beginning with the task of processing records, the plan is to extend the service to include information on the patient's daily record, reports on his medical history and similar information which would be electronically available at the attending physician's request.

Computers are playing an increasingly important part in the business world and there is no reason why their advantages should not be utilized by hospitals. It seems obvious their use will result in greater economies. It is hoped that the Indiana University Medical Center hospitals, the Marion County General Hospital and the Blood Bank of Marion County will participate.

The three hospitals and Crossroads are to be congratulated for their enterprise. More efficient service is bound to result and any effort to curtail the mounting costs of hospitalization is welcome.—*The Indianapolis News*, Jan. 11, 1967. ◄



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The Journal
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Supervised by THE COUNCIL
Volume 60 — March 1967 — Number 3

Case report of an unusual obstructive lesion of the stomach and duodenum, non-neoplastic, with a heavy infiltration of tissue with eosinophilic leukocytes, and a peripheral eosinophilia of 28 to 39%. Despite unknown etiology, treatment by subtotal gastrectomy is effective, as is non-operative treatment with steroids.

Pseudotumor of the Stomach and Duodenum

HARLAN B. MOSS, M.D.*
WILLIAM SHUCK, M.D.†

PSEUDOTUMOR of the stomach and duodenum is a rare lesion. Fewer than 70 cases are reported in the world's medieal literature. Because of its rarity and because of the dearth of information about its eause, the following case is reported.

Case Report

A 55-year-old colored man was admitted to the Marion County General Hospital on October 6, 1965, complaining of pain in the upper abdomen. He described this as a feeling of pressure that was relieved partially by belehing. It had been present for about two weeks. Nausea also occurred, but he had not vomited. The pain, not related to food intake, at times went through to his baek. A secondary complaint was difficulty in swallowing. He had had no hematemesis, melena, diarrhea or constipation.

His past medieal history revealed that he was first admitted to General Hospital in 1951 for a gastroenteritis of undetermined eause. At that time his blood count showed 55% eosinophils. Specific searches for parasites and allergens were not fruitful. He was in the hospital one week.

In 1955, he was admitted again with a diagnosis of acute aleoholie halluei-nations which subsided rapidly with fluids and sedation.

He returned in 1956 with symptoms of anorexia, weight loss and abdominal pain. A physieal finding of question-able ascites was recorded. At this admission Ascaris lumbricoides ova and Giardia lamblia were found in his stools.

X-rays taken in 1960 showed a non-funetioning gallbladder. An upper gastrointestinal x-ray series revealed diverticula of the middle and lower third of the esophagus along with extrinsie pressure on the lesser curvature of the stomach. A cholecystectomy was done. In the operative report, there was no mention of any abnormality of the stomach or duodenum.

One year later, he again spent nine days in the hospital with undiagnosed abdominal pain. An upper gastrointestinal x-ray again showed esophageal diverticula, and a prolapse of gastrie mucosa into the duodenum was deseribed.

Physical examination at the admission in 1965 was normal exeept for slight tenderness in the mid-epigastrium. On Oetober 7, 1965, his total white blood eell count was 14,600 with 28% eosinophils. On Oetober 15, his total count was 11,400 with 39% eosinophils. A 12-hour gastric aspiration was done on Oetober 8, 1965. The total amount obtained was 900 cc, pH was 1.5 with a free acid of 50 degrees and a total aeid of 75 degrees.

X-ray examination of the upper gastrointestinal tract showed, in addition to the esophageal divertieula, a deformity of the distal antrum and pylorus that was interpreted as probable gastrie uleer (Figure 1).

On Oetober 27, 1965, a subtotal gastreetomy was done with a Billroth II realignment. The findings at operation were striking. Many adhesions were present between the duodenum and the gallbladder bed and much time was taken in dissection of this area. A marked thickening of the entire wall of the distal stomach had the appearance of considerable edema accom-

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FIGURE 1
STOMACH x-ray showing antral and pyloric deformity.

panied by inflammation. All these changes carried over into the first and second portions of the duodenum so that it was hard to tell where the duodenum actually started. An enlarged lymph node next to the pylorus was removed and submitted for biopsy. The report indicated inflammatory hyperplasia—no malignancy.

When the duodenum was transected, the pyloric canal was found to be very narrow, admitting only the tip of the finger. Examination of the specimen did not reveal an ulcer in the stomach.

The duodenum could not be securely closed because of the marked edema. A number 18 Foley catheter was anchored in the duodenum and brought out through a stab wound in the right subcostal region. A tube gastrostomy was also done.

His postoperative course was marked by some temperature elevation, drainage of duodenal contents around the catheter as well as through it, and an elevated serum amylase. He gradually recovered over a period of seven weeks.

On November 19, 1965, his total white count was 11,600 with 3% eosinophils. A 12-hour gastric aspiration done on December 15, 1965 revealed a total volume of 30cc with 4° free acid, 34° total acid and a pH of 4. He was discharged December 19, 1965. On January 19, 1966, he was seen in the outpatient clinic and had no complaints. His white blood cell count was normal with 7% eosinophils.

The microscopic report on the surgical specimen was as follows: Multiple sections of the stomach reveal an obvious marked thickening of the wall. The mucosa appears to be intact, but has been denuded artefactually. The lamina propria is infiltrated with inflammatory cells. The submucosa also is edematous and inflamed. The most noteworthy histologic finding is a massive thickening of the muscularis which is due to proliferation of what appears to be fibrous tissue in bands or whorls. Separating the masses of fibrous tissue are prominent accumulations of inflammatory cells consisting primarily of eosinophilic polymorphonuclear leukocytes. These inflammatory cells are also prominent around all the blood vessels throughout the wall and form a thick layer in the subserosal area. The inflammatory reaction extends from the stomach into the portion of the duodenum present in the section. No neoplastic tissue is present in the planes of our sections. This fibroblastic and inflammatory response is compatible with a condition known as a pseudotumor of the stomach (Figure 2).

Discussion

The existence of this lesion creates a problem in differential diagnosis. The roentgenologic appearance of the antrum and pyloric canal strongly suggest a space-occupying tumor that might be interpreted as carcinoma.[32,33] The prognosis, of course, is much better with an inflammatory pseudotumor than it is for gastric carcinoma.

Approximately 100 cases of inflammatory pseudotumor with eosinophilic infiltration of the gastrointestinal tract have been reported in the world's medical literature. Of these about 60 have been located in the stomach and/or duodenum. Of the remainder most are located in the ileum.

Much difficulty is encountered in finding all the case reports in the lit-



FIGURE 2
PHOTOMICROGRAPH of stomach wall sho ing massive eosinophilic infiltration.

erature because of the diversity of tl titles encountered. In addition to i flammatory pseudotumor,[7,23] the lesic has been reported as inflammato fibroid polyps,[6,15] an eosinophil granuloma,[2,3,5,8,14,18,37] eosinophil gastroduodenitis,[25] primary infiltrati eosinophilic gastritis, enteritis ar peritonitis,[34] gastric lesion of Loeffler syndrome,[29] gastric submucosal gran loma with eosinophilic infiltration, eosinophilic gastroduodenopathy, eosinophilic gastritis,[10,13] eosinophil gastroenteritis,[11,17] eosinophilic inf tration of the stomach and bowel, eosinophilic granuloblastoma of sto ach,[9,27] and idiopathic eosinophilic i filtration of the gastrointestinal trac diffuse and circumscribed.[35] In add tion a Russian has reported 21 autops cases designating them only as gran lomatous polypi of the stomach.[31]

Almost invariably an eosinophil pseudotumor of the pylorus and duod num is accompanied by peripher eosinophilia.[11,18,20,25,28,34] This is n always true of eosinophilic tumors els where in the gastrointestinal trac Nevertheless, the diagnosis has to b established by histologic examinatio Laparotomy is necessary to obta tissue. There is some difference

opinion about the next step to be taken. Because of signs of outlet obstruction of the stomach, in most instances gastric resection has been done[7,16,24,30,31] In these cases there is danger of duodenal stump leak caused by marked edema and thickening of the duodenal wall.[4,20] This complication should be anticipated and provisions made for dealing with it.

Other authorities recommend only a biopsy at the time of laparotomy for establishing the diagnosis. Subsequent treatment with ACTH or cortisone has produced remissions.[1,12,26,30]

Relapses, of course, can and do occur with either method of treatment, but they seem to be more frequent in biopsy-only cases when corticosteroids are withdrawn.

Gastroenterostomy alone as a method of treatment has seldom been used.

Etiology

Practically all hypotheses relating to possible causes for pseudotumor of the stomach refer directly or indirectly to the eosinophil. It has been said by pathologists that eosinophils exhibit chemotaxis and phagocytosis but these cells seem to be less efficient phagocytes than are neutrophils. Does this condition represent an altered response to a foreign body? If so, what foreign body? A protein, a mineral, a carbohydrate? Or is this a response in these individuals to a disorder of absorption? Is it a defect in the gastrointestinal tract that allows large food molecules to penetrate the mucosa under certain conditions? The answers aren't known.

The first cases were reported by Kaijser in 1937.[19] Since then there have been scattered case reports from all parts of the world.

Why there should be no reports before 1937 is hard to understand. Microscopic anatomists were well-schooled for 50 years before that time and it's inconceivable that they could have missed an entity showing such a striking picture. Perhaps the date 1937 is of some significance. At about this time the broad group of chemotherapeutic agents—the sulfa drugs—began to be used. But there has never been any definite relationship shown between the sulfa drugs and eosinophilic pseudotumors in the intestinal tract. The same holds true for penicillin and the broad spectrum antibiotics.

In Kaijser's three cases, the individual with a pyloric lesion was allergic to onions. In the two cases with small intestine lesions, each was allergic to neoarsphenamine. Some conditions in addition to allergy that are associated with increased numbers of eosinophils have been blamed for the presence of eosinophilic pseudotumors. Parasites, atopic eczemas, Hodgkin's disease, and Crohn's disease have all been looked upon with suspicion, but none of these have been shown to be consistently associated with eosinophilic pseudotumors of the gastrointestinal tract.

Kuipers[21,22] from Holland and Ashby[2] from England reported individuals with intestinal involvement who showed evidence of allergic reaction to Eustoma rotundatum, a parasite of the North Sea herring. These authors did not claim that cases from all over the world were caused by ingestion of uncooked North Sea herring.

Recently Higgins and his coworkers[17] reported the case of a young man who accidentally ingested some soldering fluid containing zinc chloride. The histologic picture of his stomach resembled that seen in eosinophilic pseudotumor.

All this discussion does not solve the problem of etiology in these cases. Perhaps there is a combination of factors necessary—something similar to patient reaction to such chemicals as thiuram disulfide (Antabuse) and tranylcypromine (Parnate). In the first instance alcohol completes the reactive pattern and in the second, cheese. But this is strictly speculation.

Indeed the cause may never be found, since these cases are so rare that it is unusual for a doctor to be able to study first-hand more than one or two during a professional lifetime.

Summary

A case of eosinophilic pseudotumor of the stomach and duodenum is reported. The problems in differential diagnosis are discussed. Theoretical causes for these cases are enumerated. The actual cause for the condition is not known and its rarity makes the sustained methodical study necessary for pinpointing etiology very difficult. For this reason it is likely to remain obscure.

Not knowing the cause, however, does not preclude effective treatment. Outlet obstruction of the stomach leads to gastric resection in most cases. At times ACTH has been used to produce remissions.

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From *The Journal* 50 Years Ago

. . . Advanced extra-uterine pregnancies, in which a living child is obtained through laparotomy, are not an every day occurrence, and it is especially rare for two such cases to occur in the experience of the same author. The author was enabled, in 1900, to observe and report a case of extra-uterine pregnancy which had progressed to the eighth lunar month, while the above described case went to term.

Jarzeff[1] points out that several forms of ectopic pregnancy may simulate a genuine abdominal pregnancy; so that this diagnosis should be rendered with great caution even on the anatomical specimen. Only those cases should pass as certain, in which neither the tubes nor the ovaries are involved in the formation of the fetal sac. In the author's opinion true abdominal pregnancy actually occurs in women, although very rarely. At the present state of our knowledge, it cannot be positively ascertained if the ovum is primarily implanted on the peritoneum, or if it passes through the first developmental stages in the tube or in the ovary . . . . Edmund D. Clark, M.D., Indianapolis, "Report of Two Cases of Extra-uterine Pregnancy at or Near Term," *JISMA*, March, 1917.

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The Case of the Wayward Bullet

JOHN E. GILLILAND, M.D.
Honduras, Central America*

A 35-year-old Latin male walked into the Clinica Evangelica Morava for consultation and treatment on June 24. 1965. Four days prior he had been shot with a 38 caliber pistol in the anterior apical area of the right shoulder. Immediately before the shooting, the patient had seen a former friend, pistol in hand, standing a short distance away on higher ground. The patient dove for the ground as the first shot was fired; a second shot hit his right hand. The patient remembers having acute pain in the inferior right lateral chest following the shot but was able to get up and walk soon afterward. He expressed the belief that the first bullet was present in the right lower quadrant of his abdomen.

Physical examination revealed a young Latin male in no apparent acute distress, complaining of mild pain in the right hand. Positive findings were a small entrance gunshot wound in the anterior apical region of the right shoulder several days old, an area of bluish green discoloration of the right anterior lateral chest along the anterior axillary line, a hard, tender two centimeter nodule in the right lower quadrant of the abdomen, brownish second degree burn type lesions of the medial aspect of the proximal phalanx of the right fourth finger and the lateral aspect of the proximal phalanx of the right fifth finger. The latter finding was stated to have been a result of the second bullet.

A PA upright film of the right shoulder and chest revealed no evidence of fracture of the shoulder. There was slight haziness in the right costophrenic angle most likely related to overlying soft tissue induration. A PA supine film of the abdomen revealed the image of a bullet about 2 cm. long present in the right lower quadrant medial and slightly inferior to the anterior superior spine of the ilium. No x-ray was taken of the fingers because clinically no fracture was suggested.

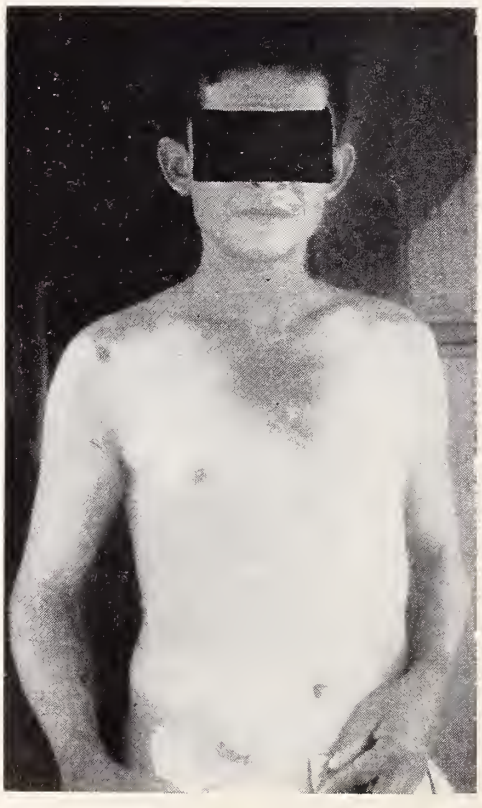


FIGURE 1

THIS picture shows the entrance wound of the bullet and the surgical incision in the right lower quadrant where the bullet was excised.

On June 25th under local anesthesia a 38 caliber bullet was removed from the subcutaneous region 2.5 cm. medial to the anterior superior spine of the ilium in the RLQ. A small amount of pyrulent material was found surrounding the bullet. A Penrose drain was left in place.

Examination revealed the bullet to be a 38 caliber with a small groove near the end 1/16 inch wide and 3/8 inch long. Otherwise there was no molding of the bullet.

Discussion

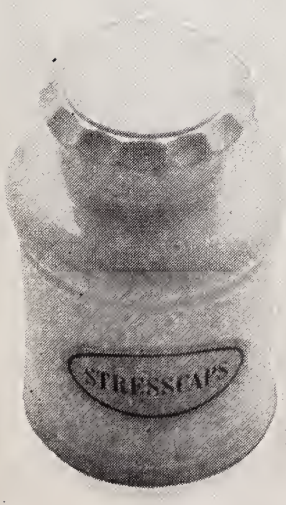
This is an interesting gunshot case because of the unusual path which the bullet followed. It apparently followed a subcutaneous route from the tip of the right shoulder to a point 2.5 cm. medial to the right anterior superior spine of the ilium. Figure 1 shows the entrance wound and the surgical incision in the RLQ, the point of the subcutaneous excision of the bullet. The patient made an uneventful recovery. ◄

* From the Clinica Evangelica Morava, Ahuas, Gracias a Dios, Honduras. Dr. Gilliland graduated from the Indiana University Medical Center and did his surgery residency at Methodist Hospital, Indianapolis.



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A report of a rare type of massive skeletal deformity with the first description to appear in the world literature of the cellular pathology of the involved bone in an adult.

Morquio's Disease

Report of a Case in an Adult with Bone Biopsy

JACK W. HICKMAN, M.D.
*Indianapolis**

MORQUIO'S disease is an infrequently seen condition manifested primarily by gross skeletal deformity and dwarfism. A report from a major referral center for children notes only ten patients with this condition over a period of 27 years.[1] It has not been clearly defined as to whether Morquio's disease is a separate clinical entity or whether it is a member of the mucopolysaccharidoses.[2,3,4] If the latter is correct, it would fit as a "cousin" of Hurler's disease or Morquio-Ullrich's disease.

Most patients with Morquio's disease have limited life expectancies, mainly because of secondary complications of the disease or to intercurrent conditions. Bone biopsy reports have been infrequent,[1,5,6] and only one autopsied case is known to us.[7] All previous bone biopsy materials have been from children. The present case is therefore unusual in that the patient represents survival to an unusually advanced age. The bone biopsy picture in an adult with this condition presents a somewhat different picture from those previously reported and therefore helps to complete the understanding of the progress of the condition.

Case Report

A 33-year-old white male was admitted to Marion County General Hospital on September 21, 1964, to undergo bone biopsy and further investigative studies for suspected Morquio's disease. The patient's deformities had been noted by his parents when he was two years old; they also observed that his gait was abnormal. Neither his parents nor his sister had a similar deformity. There was no family history of consanguinity.

Past history revealed fractures of the right femur, right ankle and right hand at different times in the past, all of which were associated with trauma. There was a suicide attempt in April, 1964. Psychiatric consultation was obtained at that time, and a diagnosis of personality disorder was made. The patient's general health had been good. He had never married and his work record had been sporadic. Review of systems revealed moderate dyspnea with prolonged physical exertion. There was no history of chest pain, orthopnea or pedal edema. The patient was troubled with an aching discomfort in both hips which was aggravated by physical exertion. The remainder of the review was essentially negative.

Physical examination revealed a grossly dwarfed white male in no distress who appeared to be his stated age. Height was 50 inches, span was 58 inches and weight was 70 pounds (Figure 1).

Blood pressure in the right arm recumbent was 120/90, and the radial pulse was 84 and regular. Respirations were 18 per minute. Oral temperature was 98.6° F. Positive points of the physical examination revealed the following: The mouth showed poor oral hygiene with numerous cavities. No corneal opacities were present. The chest showed a very prominent sternal bulging and deformity. Kyphoscoliosis was noted. A grade II/VI systolic murmur was present over the precordium; no thrills or cardiomegaly were noted. The liver, spleen, and kidneys were not palpable. Orthopedic examination of the upper extremities revealed both shoulders to be well located. The head of the humerus was more prominent anteriorly than normal. The elbows showed bulbous deformities and lack of complete extension to approximately 35 degrees. Flexion was full. Pronation and supination were normal. The left distal radial ulnar joint was very prominent, and the patient had loss of ulnar deviation because of a very prominent ulna.

In both hands the carpals were very difficult to palpate, at least the proximal row, with subluxation present at this area on pressure. This did not cause any pain, however. The metacarpal-phalangeal joints showed slight fullness bilaterally in all of the joints, and there was mild flaring of the interphalangeal joints in all fingers. Joint motion was excellent. Examination of the spine revealed a marked kyphosis with mild scoliosis to the right side. The manubrium was parallel to the ground, and the sternum was anteriorly placed and very prominent. The pelvis was small. The patient ambulated with a gluteus medius lurch

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bilaterally. Both hips were dislocated posteriorly and superiorly. The right was tender especially on internal rotation. Examination of the hip revealed the right lower extremity to be in marked external rotation approximately 50 degrees. There was pain on internal rotation at 120 degrees. There was a mild flexion contracture of both hips of about 10 degrees.

The knees showed some crepitus bilaterally and were not particularly enlarged. There was considerable muscular atrophy present. The patient did not have knock knees or flat feet. The right ankle exhibited a bulbous deformity. The fibular malleolus could not be palpated easily, and there was a decrease in motion on that side—the site of an old fracture. Neurological examination revealed no abnormalities. There was no pedal edema.

The patient demonstrated some hostility during hospitalization, and rather frequent references to self-depreciation were noted. His mental development was judged to be in the low-normal range.

The following laboratory studies were obtained: hemoglobin was 14.5 gm.%. The white blood count was 8,650 cells mm.^{3} with 61% neutrophils, 35% lymphocytes and 4% eosinophils. No Reilly granulations were seen in the leukocytes. Urinalysis was negative. Venereal Disease Research Laboratory Test was negative. Fasting blood sugar was 73 mgm.%, and blood urea nitrogen was 10 mgm.%. The serum calcium was 8.9 mgm.%; the serum phosphorus 4.0 mgm.% and the alkaline phosphatase was 6.3 King Armstrong units. The serum uric acid was 4.9 mgm.%. Latex fixation test was negative. Urinary mucopolysaccharides were determined on a 24-hour urine sample in the Lilly Laboratory for Clinical Research. This was measured as 90.1 micromoles of sialic acid which is definitely not an elevated level in this laboratory. More direct fractionation of mucopolysaccharides could not be obtained.

An electrocardiogram was essentially normal. The P-A chest film showed no cardiomegaly, and the lung fields were clear (Figure 2). Marked dorsal kyphoscoliosis was present along with the characteristic flattening and elongation of the vertebral bodies. All metaphyses were deformed. The lumbosacral x-rays (Figure 3) also demonstrated marked lumbar lordosis. The 11th and 12th dorsal and first lumbar vertebral bodies appeared shortened, and the remaining lumbar vertebral bodies had anterior narrowing and considerable irregularity at the articular margins. Both hips showed dislocation with some widening and deformity of the femoral heads and shortening of the femoral necks (Figure 4). The acetabulae were irregular and enlarged. The x-rays of the hands clearly showed the lack of development of the carpal bones (Figure 5).

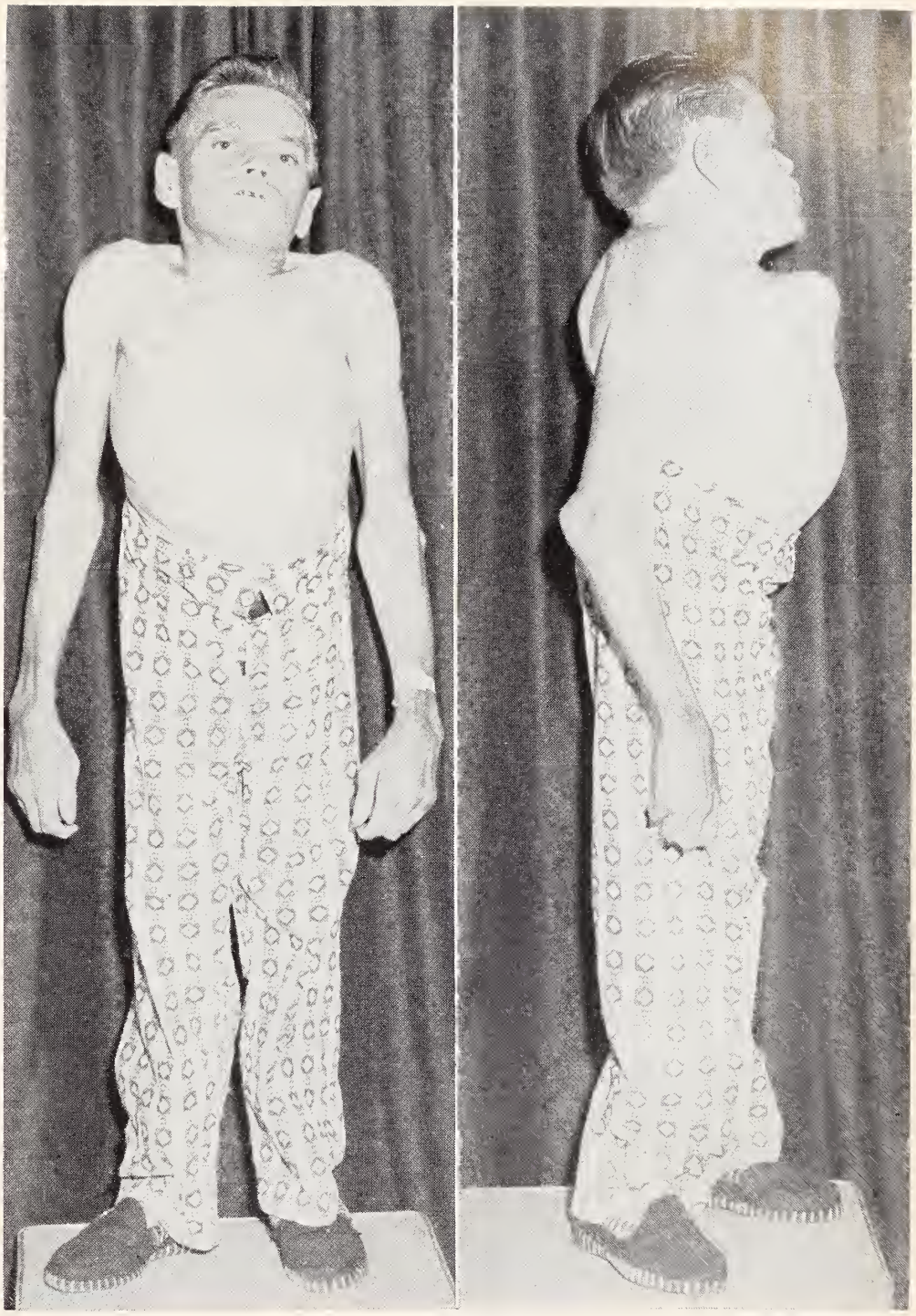


FIGURE 1

FRONT and side views of patient. Illustrates gross body deformities. The sternal deformity which is so characteristic of this condition is well illlustrated in the side view.

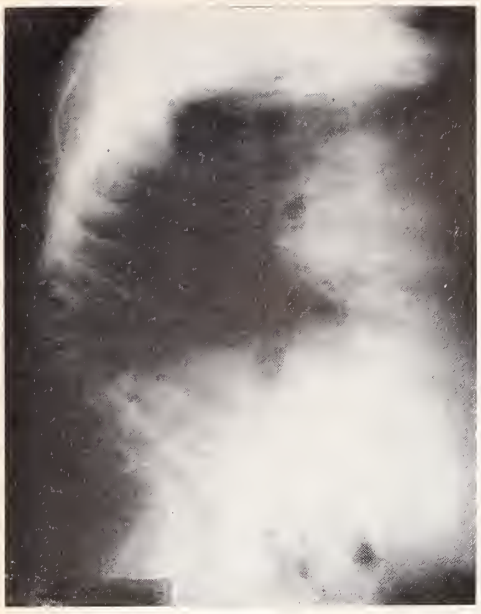


FIGURE 2
LATERAL x-ray of chest and spine. Note classical deformities of vertebral bodies. The marked dorsal kyphosis is quite evident.

On September 23, 1964, under supraclavicular brachial plexus block anesthesia, a biopsy of the distal left ulna was obtained by Robert Brueckmann, M.D. The patient tolerated the procedure well and was released from the hospital on September 25. Follow-up visits have shown good healing of the biopsy site and slightly increased motion at the joint with less discomfort than was present before the biopsy.



FIGURE 3
LATERAL view of lumbosacral spines. Typical vertebral body deformity is illustrated, as well as marked lumbar lordosis and pelvic tilt.

The bone biopsy sections revealed an overall picture of structural immaturity with a lack of the warp and woof of normally developed bone (Figures 6, 7). Roughly 60% of the structure was that of non-lamellar bone. Haversian canals were seen very infrequently and were irregularly oriented. Large areas of resorption with numerous Howship's surfaces were identified. Typical osteoclasts were not seen frequently at the resorptive surfaces, however, and fat cells were seen adjacent to or even within Howship's lacunae.

The number of osteocyte lacunae appeared to be increased, and there were no empty lacunae or dead osteocytes visible. The osteocytes tended to have chondroid features, another finding consistent with the overall picture of bone immaturity. Some osteoclasts could be identified, as could some osteoblasts; many of the latter appeared to be fusiform in structure, however. Although a few areas of new bone formation were present and there was no evidence to indicate any deficiency in mineralization in any section, very little osteoid formation was noted.

The vascular spaces were irregularly shaped and oriented, and these tended to dissect out thin planes throughout the cortical bone. The vascular spaces were smaller than normal and contained an abundance of undifferentiated mesenchymal cells. The vascular tubes within these spaces frequently communicated with smaller tubes that seemed to penetrate the compact bone and terminate in osteocyte lacunae.

The cartilage was lacking in striations under examination with polarized light; however, some evidence of cross banding was noted in the fibrous cartilage.

Discussion

The gross bodily deformities that comprise Morquio's disease make clinical diagnosis of the condition a relatively simple matter.[8] The condition may be in the group of mucopolysaccharidoses.[9,10] The lack of marked mental retardation and deformed facies separates it from Hurler's disease.[11] In recent years, some authors have made a differentiation between Morquio-Brailsford disease and Morquio-Ullrich disease.[12,13,14] The present patient would fall in the former category since patients with Morquio-Ullrich disease are more likely to have severe mental retardation, enlargement of the liver and spleen, and corneal opacities. Abnormal mucopolysaccharide metabolism may be present in all three conditions. The radiologic, laboratory and clinical manifestations of Morquio-Brailsford disease have been well described in a number of previous reports. Blood chemistry



FIGURE 4
X-RAY of pelvis. Note deformities of pelvis and heads of femurs. The acetabulae are enlarged and irregular.

studies are usually within normal limits[15,16] with the major exception of the hypocalcemia noted in the original description by Morquio.[17] With advancement in technics for urinary mucopolysaccharide determination, it may be possible to delineate the various clinical entities that comprise the mucopolysaccharidoses more clearly.

Patients with even the milder Morquio-Brailsford condition do not appear to do well and do not often attain normal social or normal academic life as has been reported previously.[18] Of the over 100 cases recorded in the literature, only one patient is noted to be older than the present case, and that patient (a 34-year-old female) had been confined to a wheel chair for the preceding 13 years because of severe skeletal deformity. Our patient demonstrated a moderately severe personality disorder, which was in large part felt to be related to his bizarre physiognomy. Intercurrent disease or frequently severe neurological defects which are secondary to the spine deformities have played important roles in shortening the duration of life of patients with the condition. Therapy has been mainly supportive in nature.

The bone biopsies in children with Morquio's disease have shown gross derangement at the epiphyseal lines and metaphysis.[19] Persistence of calcified cartilage masses in the metaphysis and decreased numbers of chondrocytes have been seen frequently. Fragmentation of the bone matrix and irregularity of cartilage columns have also been noted. Some of the cartilage masses have appeared to have been undergoing a hyaline-type degeneration and fibrosis. The number and appearance of osteoblasts and osteoclasts in the metaphysis have been reported to be normal, although many of the osteoblasts in the present case were morphologically somewhat abnormal.

The most marked changes have been reported at the line of enchondral ossification and in the epiphyseal cartilage. General disorganization of carti-



FIGURE 5
X-RAY of hands demonstrates very clearly the absence of development of carpal bones as well as some patchy irregularities in other areas.

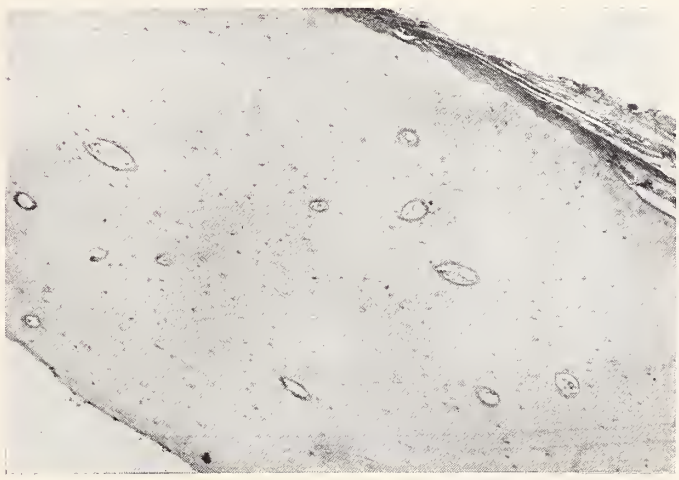


FIGURE 6
PHOTO-MICROGRAPH of bone biopsy from left ulna. Irregularity of bone maturation and haversian canals is demonstrated. Osteocytes in lacunae are clearly visible (x10).



FIGURE 7
PHOTO-MICROGRAPH of bone biopsy. Illustrates gross disorganization, bone atrophy and general disorganization of structure (x10).

lage cells in this area is uniformly seen. The defect in bone development does not seem to be related to faulty mineralization. Large irregular calcified and non-calcified cartilaginous masses at the metaphyses containing areas of degeneration and fibrosis have been described histologically in children with this condition. Somewhat similar areas were seen in the present case, but these were not nearly as prominent as in the reports in children. This could represent a relative inactivity of the condition after it had progressed to the point of gross disorganization and atrophy.

It will be important to know if Morquio's disease is indeed one of the mucopolysaccharidoses with deranged keratosulfate metabolism. Keratosulfate has been found to be intimately related to calcification, and it could, then, be speculated that abnormally high keratosulfate levels in the bone might play an important role in producing the bizarre histologic picture through altered bone metabolism.

The findings in our patient demonstrate the progression of bone changes from those as noted above in the younger patients with the condition. The post-puberty hormonal changes and questionable progression of the disease may each add to the altered histologic picture in our patient.

Summary

The first reported bone biopsy in an adult with Morquio-Brailsford disease is presented. From this, it has been shown that the natural progression of this condition, which may be one of the mucopolysaccharidoses, is to one of gross disorganization of bone structure with immaturity and perhaps atrophy playing an increasingly important part. Prognosis must be guarded in this condition as to both life expectancy and the individual's chance for becoming a productive member of society.

Acknowledgment

The author wishes to thank David J. Baylink, M.D. and Lewis M. Hurxthal, M.D., Boston, Massachusetts, for their help in interpretation of the bone biopsy material.

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The Case of Unobtainable Oblivion

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New York, N. Y.

NOT too long ago, my wife and I saw that deeply moving Czech film, "The Shop on Main Street." As we were leaving the cinema, she remarked, "I wonder whether these Nazi-trained anti-Semites are *really* capable of such remorse?"

Well! Just that week, I had seen the end of a real life drama that I had been following over the years. There *may* be the divine spark lingering in creatures seemingly beyond the human pale. As this particular reel unfolded itself on the screen of my memory, I thought I muttered, "And who are we to sit in judgment?"

Long-term memory recall started unhesitatingly with a spectacular event long past but not to be forgotten. In our ever changing lexicon, *happenings* are carefully contrived, even if apparently haphazard, unstaged occurrences. This particular, serio-comic, early Sunday a.m., emergency room happenstance was assuredly unpremeditated; it classifies as a "happening" in any language.

While I am an early morning riser, being in the habit of making before breakfast rounds, I was not happy at being awakened shortly after midnight by a worried nurse. She could not locate the resident and this patient of mine was deteriorating at an alarming pace. She was merely doing her duty as I had to do mine. Within the half-hour, I *happened* to be strolling into this particular hospital via the emergency room entrance. The debris of Saturday night events was still being cleaned up. I had paid no heed to the babble of sound behind the swinging doors leading to the ambulance, stretcher case area. I was slightly startled to have my arm suddenly clasped firmly by the night nurse supervisor. She had materialized so quickly that I had not seen her rushing up.

"Oh, Dr. L.! I'm *so* glad to see an attending here! We have a very bizarre *happening* there"—pointing at the closed doors— "and the only available resident scrubbed is stitching up a stabbing. Please, come with me!"

"Nursing her wrath to keep it warm. . . ."

Ere I could protest, I was practically thrust through doors and into the already crowded room. A man was lying prone on a stretcher; his head was partially propped up sideways by a pillow under the chin. Both the stretcher bearers AND a couple of policemen PLUS a nurse and an orderly left very little space into which the supervisor and I could wriggle. However, it was a shrieking harridan, screaming Slavic obscenities at the strapped-in patient, that created the noise and added the touch of bizarrerie to the ensemble. An elderly disheveled, totally dirty, obviously drunken, raucously repugnant termagant—it was her crescendo of curses that I had been hearing through the doors. At close range, her grating imprecations were deafening decibels.

My first focus on the patient explained the need for my presence. A large kitchen cleaver was protruding from his back, having been buried just above his left buttock.

"She done it!", said the policeman indicating the harpy with his thumb. "She's his wife and they are both drunk!" That was belaboring the obvious.

After having the still screeching slattern taken aside, I approached the stretcher for a closer look. The man's huge pants belt had absorbed the main force of the roundhouse swing. While the metal was wedged in firmly, no vital structures seemed to have been hurt; the blood loss must have been minimal. In fact, the clothes were soiled with excrement rather than caked with blood. A quick survey showed all vital signs A-OK. The alcohol level of the blood would be another matter.

I turned to the supervisor, "Well, Mrs. S.! Nowadays, I'm an internist but—in the absence of any surgeon—I'll call upon my general practitioner days. With your able assistance, we'll cope with this family spat pronto. I had almost the replica of this very situation when I was a Cook County Hospital resident in the Al Capone era."*

* Cold steel is still used in anger but American doctors are seeing ever fewer serious consequences of knifings: James Bond thrillers notwithstanding. Just recently, while in South Africa for a lecture, I became acquainted with an astonishing type of mayhem practiced by the *Tsotsis*, Bantu gangsters. They employ a long stiletto—really a rapier—to stab their prey in the back. The thin blade runs along the edge of the rib and enters the spinal canal severing the cord at about T_4. The pithed young men become permanent paraplegics. The all Negro hospital, Baragawanath, has two whole wards filled with the hapless victims. The perpetrators of the crime, when apprehended, are charged with felonious assault: not murder. Instead of being hanged, they get some 3-5 years at hard labor.

"Leave the patient right there on the stretcher. We need no anesthesia: the liquor has taken care of that. Cut the clothing off all around that cleaver; use soap and water aplenty. All I'll need will be a suture set and gloves. Have some sulfa powder and a gauze wick handy."

And so it proved. When I returned from a quick look-see at my private patient upstairs, all was ready. The kitchen utensil rocked loose easily; not a single bleeder spurted! We flushed with H_2O_2, painted with merthiolate, used the gauze drain and closed the gash with several figure eight interrupted sutures.

"Ah, there, Mrs. S.! Please, ask the surgeons to keep this man upstairs a couple of days. Before going on the ward, be so good as to have a couple of films taken. Don't forget the tetanus antitoxin and toxoid; have the boys load him with antibiotics!"

"A cup of kindness?"

That afternoon, I stopped on the traumatic ward to see the now peacefully snoring patient. I did a double take when I looked on the name plate: *Chisto Zhopa!* The nice Polish resident blushed when he met my reproachful gaze, "Sir! I forgot that you know some of the Slavic languages. His *real* name is so close to that that I just succumbed to temptation!"

"Well! Please, have the card changed before some of his Ukrainian* friends from the window washers' union drop in on him. His rear may be clean but don't belabor *that* point!"

I next ran into our man in the OPD. The wound had healed uneventfully but he was badly undernourished. In his diet, the proteins had been replaced by the carbohydrates in the liquor he was imbibing. The Scots are proud of their whiskies used so copiously; also, they eat well so that cirrhosis is not too commonplace among them. The Bantus of South Africa are also well-known for the strong liquor they consume.



However, their diet is very low in proteins for economic reasons only too obvious. They have cirrhotic livers and beriberi hearts aplenty.

The henpecked Ukrainian had severe deficiency manifestations. The cardiomegaly was of the thiamine lack type; the liver was palpable and probably fatty. The integument was pudgy with the edema of hypoproteinemia. He had the typical, dour visage of the almost inarticulate moujik.

Over the succeeding visits, we managed to dredge up some sparse driblets of his past. During World War II, he had been a Nazi collaborator; as the Russians approached, he had fled westward with his family. His wife and he had made it to the American zone; their infant son had become very ill during their Hegira; he had to be left with some relatives. Thank God, the child survived; occasionally, they heard of him; maybe, some day, he would join them in the States.

Not only was the refugee reticent—more often than not, he was also inebriated. One day, I taxed him sternly with being tipsy. "But, doctor, I take only a double shot at a time: with *LOTS* of orange juice!"—this last most emphatically.

"And how many times a day?"

"Maybe every hour or so!"

"But — why? ?"

"Well, doctor, there are so many devils chasing me! The drinks blur them. . . ."

"And leave us nought but grief and pain. . . ."

The stolid Slav was seeking "*unobtainable oblivion*"—from what? ? The tale of what was making the dull moujik quake even on his present level must be a real lulu! Too bad that we could neither cajole nor wheedle anything from him! He just clammed up!

Run of the mill alcoholics are too common for comment. However, the cleaver caper AND the play on his name by the resident had fixed this window washer's face in my mind. He was a *steady* drinker rather than the week-end debauchee gulping the stuff a pint at a time. The liver can detoxify some 15 cc.'s of alcohol an hour all day long even if it has no margin for a backlog. Our friend was exceeding this limit daily—but not by much! Ergo, his liver cells were surviving much longer than they do in the usual Bowery bum.

The periodic heavy drinker has a debilitating debauch that produces gastrointestinal symptoms such as nausea and vomiting; then, follow palpitations, tachycardia and increasing agitation, becoming ever more violent. This can lead to the typical "shakes" of delirium tremens, violent hallucinations, terminal coma and death. The treatment is purely symptomatic and preventative when this is still possible.**

"I'm not the thing I should be. . . ."

Over the succeeding years, I followed the slow but steady progression of this rake's deteriorating physique. One day, he came in spitting up some blood. The usual tests were unrevealing even if, this time, the prothrombin time was elevated by a few seconds. He was hospitalized; my clinical diagnosis was "esophageal varices." X-rays were "mildly suspicious"; a competent specialist was persuaded to use an

* Just why do Ukrainians become window washers (See "Case of the Cement Boot," *JISMA* 53:1, 1960, pp. 1137-42) while Mohawk Indians specialize on the high steel?

** Liver function tests are constantly being improved and refined. At present, we still tend to place primary reliance on the clinical history. By the time that the function tests become really positive, the diagnosis can usually be made at first glance. However, see "Colombian Snail Connoisseur," *JISMA* 54:4, 1961, pp. 488-93; *Liver Function Tests* (Lilly); Boyd's *Pathology;* Anderson's *Pathology;* any standard textbook, etc.

esophagoscope. Gentle passage of this instrument brought into view several small varices. One of them was the source of the "trifling" hematemesis.

After a thorough intramural debate, the surgeons proceeded to open our patient. They were not surprised to see the extensive portal vein hypertension. The liver was grossly fatty; a frozen section was diagnosed by the pathologist as "Laennec cirrhosis in the earlier, fatty enlargement stage. . . ." The surgeons did a portocaval shunt (Eck fistula).*

What with a good, high protein diet and enforced sobriety, the two months on the ward all but rejuvenated the patient. The puffy look of hypoproteinemia disappeared; speech cleared; even the mentation improved. However, this last was not to his advantage: he became ever more somber and depressed. He still did not break down and unburden himself of the specters that were haunting him. We were considering psychiatric attention such as shock therapy. He up and signed himself out one evening when a new intern, not familiar with the case, was making rounds. It was Fate; *we* had to have faith.

"To See Ourselves as Others See Us"

More years passed; the past was brought up to the here and now. As I was leaving the same hospital by the identical emergency room entrance, a shambling derelict almost bumped into me. He swayed, looked up at me dully: and mumbled my name! As I looked more closely through the masking grime, I recognized the window washer —but what a change!

The skin and sclerae were yellowish; the abdomen was globular and bulging tensely with ascitic fluid; the reek of fetor hepaticus was all too potent; the obtundation was verging on stupor. Gently, I led him by the hand to the emergency room for admission as "impending hepatorenal coma."

A cursory ward examination showed the pupils to be dilated; the eye grounds were not too abnormal. The mouth had stumps of rotten teeth and that horrible stench of the ammonia laden exhalations. The temperature was only 100.6 rectally; the stertorous respirations were slow and fairly even. The B.P. was 130/90. The heart was enlarged as before; there were still the trifling pansystolic murmurs with the added finding of a pericardial friction rub.

The enormously distended abdomen was tapped using a small gauge needle: a gallon or so of clear transudate was drained off slowly. The resident stood by monitoring the procedure.** The hard knobby liver became palpable only a finger's breadth beneath the costal margin. It certainly had been shrinking. We saw no spider angiomata; the scar of the old abdominal surgery for the Eck fistula was well healed. The bladder was enormously distended. A rectal exam was unrevealing; the urinary catheter drained off some 1,500 cc.'s of cloudy fluid; a Foley was left in place. Both Babinski reflexes were positive while the knee jerks were hard to elicit. There was no clonus.

The laboratory data now was abundantly confirmatory of what we already knew. The LDH isoenzymes, more specifically the #4 and 5, were in their right places on the strip of electrophoretic paper. The hepato-cellular jaundice was obvious clinically *and* in the four basic groups of liver function tests: 1) bilirubin and urobilinogen were abundant in the urine and the ascitic fluid; 2) the cephalin flocculation test was four plus; 3) not only the LDH enzymes but also the transaminases among others were significantly elevated; 4) even the alkaline phosphatase was higher than normal. The blood ammonia was at the coma level of 300+ ug/100 cc; we did not bother with liver needle biopsy, I^{131} Rose Bengal scan or an EEG.

We did attempt to normalize the unbalanced electrolytes and do the purely palliative. Obviously, he was too obtunded to know that the formerly *elusive unobtainable oblivion* was almost here.

"Man's inhumanity to man. . . ."

And then—on the unwinding reel of total recall—there flashed still another *happening* upon the memory screen. Of course, the patient had been placed on the critical list so that a telegram had gone out. We did not really expect to glimpse that charming wife of his. We certainly were startled to see—the very next morning—a young, ramrod straight, unmistakable military figure striding to the bedside. The resident and I *happened* to be there. In well-modulated, precisely clipped and heavily accented English, the trans Iron

---

* The liver is by far the largest gland of the body. Whether it manufactures 500 or 5,000 enzymes is not relevant here. As macromolecular medicine will develop further, we'll be seeing precise steric chemical formulae. At present, we can say that severe, dietary deficiency results in mobilization of fatty acids. Choline and methionins are inadequate as the plasma lipids increase. As methionine is the primary methyl donor in the metabolic cycles, the cellular need for phospholipids is the inexorable consequence producing the familiar, fatty livers. Lipocaic administration, sometimes, can be a preventative and a cure.

** As a Cook County Hospital resident, I remember taking off 33 liters (that is right: almost nine gallons) at one sitting. The valor of ignorance paid off in that instance but it cannot be recommended. Sudden, radical decrease of the intraabdominal pressure can—and docs—lead to disastrous cardiac dilatation with standstill in diastole.

Curtain officer introduced himself. Clicking his heels, "I have just come to New York City with a Czech diplomatic passport. I've been looking for that man since two days. Neither he nor his wife have been seen by their neighbors for the last several days. I appropriated the telegram; how long has he to live?"

I surveyed with interest this stranger from another world, "And, pray, who are you and what concern is he to you?"

"Officially, I carry his name. However. I've known for a long time that they are no relatives of mine. Yesterday, I went through his flat. Along with his passport, this dog (pointing at the comatose form) kept the papers from the orphanage where I had been abandoned. I now know the names of my real parents. That was the reason for my trip abroad."

The belabored English was a barrier to the many questions forming in my mind. "Please, speak to me in Russian; I'm sure we both have some fluency in it."

The stranger gave me a hard, suspicious look—then, he answered gratefully as the floodgates burst open. Not only had "that slavering dog there"—again jerking his thumb—been a collaborator of the Nazis. A former, trusted employee of the most prominent Jewish merchant of his little "shtetl" (town) he had been the Judas goat betraying the entire Jewish (and Polish) community of that whole county for plunder and worse by the rapacious Germans. Almost all the Jews had been shipped to nearby Ausschwitz by the time the tide turned. This merchant had been held in the local jail until the day before the SS'ers were to flee before the advancing Russians. Holding a last drunken orgy, these "supermen" had not only slaughtered the last of the prisoners: they had also beaten up



that "pile of dung" there. In reprisal, maybe (?) "this toadying S.O.B." had snatched from the butchers the Jew baby ("Yeah, me!").

"I was taken with them as he and his wife fled westward. Crossing the Carpathians, the extra baggage became too much. I was dumped at a Catholic orphanage! So, I was reared first by the nuns; then, as a proper Communist pioneer! I'll make it short! I went to a secondary school and then had an army indoctrination course. So, now I'm an officer in the Security Border Guard forces that patrol the German frontier.

"You Americans have a habit of coddling Fascists and Nazis! Well! We don't! If a war erupts, it'll be a pleasure to A-rocket them off the face of this long tolerant earth! Have you read Tetens' *The New Germany and the Old Nazis?* We used that for our English practice reader. Of course, the author is prejudiced but he certainly cites chapter and verse.

"Anyway, I've received mail from this vermin here! My superiors have permitted me to come here so I could dig into my real background. Now I know. Should I defect to Israel and join a kibbutz? Or, shall I return to my unit and keep a vengeful eye on those smug, Aryan bastards?"

As the story tumbled out, I was not only fascinated but genuinely moved! The young man had been shaken loose of his moorings; he had my profoundest sympathy. "Why don't you meet me tonight in this hospital's dining room? There, we can philosophize at our leisure."

The evening was more than interesting. The diplomat had brought along some first class conversation lubricant: the stuff that enables good fellows to probe life's great tragedies with less sorrow to a profounder depth. . . . It was I who quoted the famous author anent the Divine Spark still lingering even in creatures seemingly lost to all human sentience. We parted at a late hour; he had a slight list to port; I *think* I hold my liquor better than that. I *hoped* I had helped him think aloud and reach a conclusion.

Oh, yes! Almost anticlimatically, the subject of this lengthening recall expired quietly before the next dawn. The autopsy was completely routine and confirmatory of what we already knew; there were no surprises. The body went to the anatomy laboratory of a medical school. The slattern wife had disappeared; there was no point in searching for her in the asphalt jungle of Hell's Kitchen.

"What did you say?" It was my wife repeating the question she had posed as we were driving away after viewing the performance of "The Shop On Main Street."

There was no point in burdening her with the detailed resume of her aging husband's ruminations. "Well, dear! Many writers MUCH greater than I have written library full tomes probing this very point. It only shows that we mortals do not possess the needed afflatus. Surely, on Judgment Day, we'll be told!" ◄

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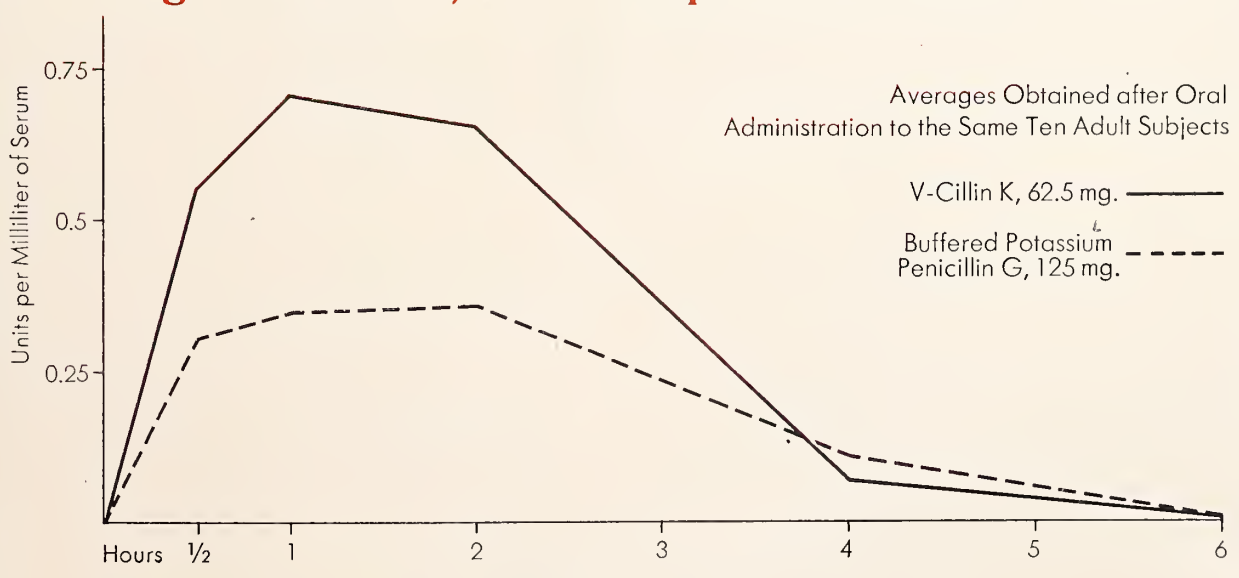
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Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269 1019, 1963.

with high blood levels, even in the presence of food



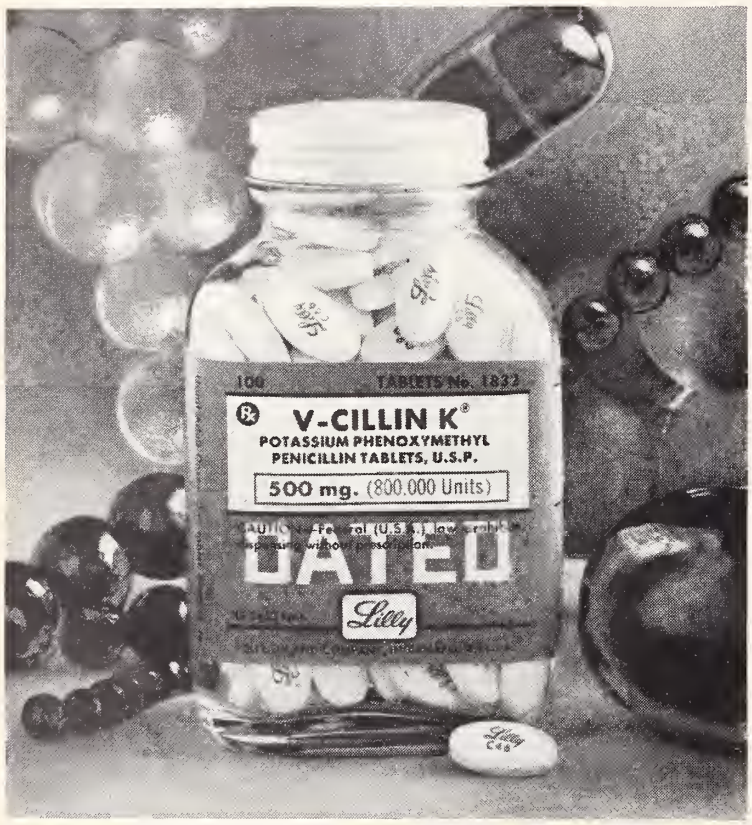
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(See next page for prescribing information.)

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V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. If hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the overgrowth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a doy. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six haurs.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion af syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

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Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

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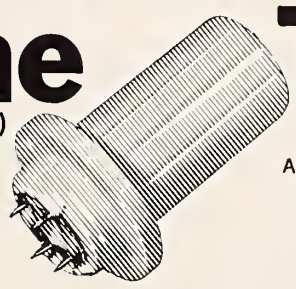
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Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Nonparoxysmal A-V Nodal Tachycardia

CHARLES FISCH, M.D.
Indianapolis

AS indicated in the "Electrocardiogram of the Month" of December, 1966, with a few exceptions such as thyrotoxicosis, occasionally mitral stenosis, severe heart failure and other less common conditions, a rapid ventricular response in atrial fibrillation indicates a need for additional digitalis. Occasionally however, and at times when least expected, pushing digitalis in order to slow the ventricular rate might result in toxic arrhythmias before the desired therapeutic goal is achieved. Furthermore, the "toxic" arrhythmias may be transient as illustrated in this report.

Figure 1 represents a single ECG. Leads II and V-2 demonstrate the absence of P waves, presence of "F" waves and a grossly irregular ventricular response, the classical criteria of atrial fibrillation. Non-specific ST-T changes are present and are most likely due to digitalis. By the time the electrode was moved to V-5 position, the rhythm became absolutely regular at a rate of 170, indicating the presence of nonparoxysmal A-V nodal tachycardia and atrial fibrillation, an indication of high degree of digitalis toxicity.

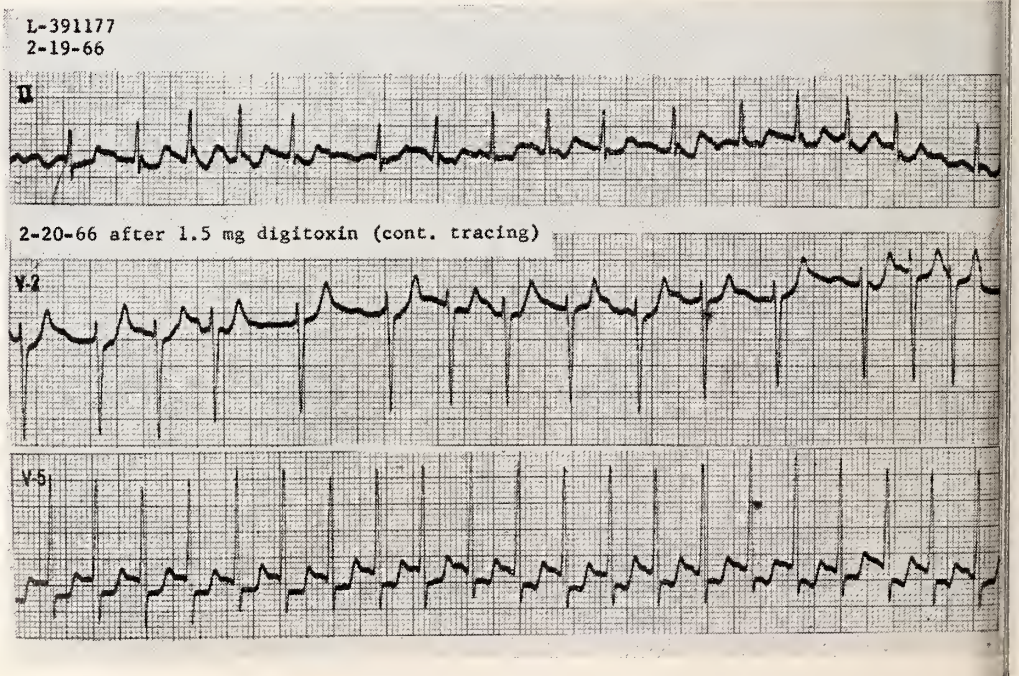


FIGURE 1
THIS tracing demonstrates atrial fibrillation in leads II and V-2 and nonparoxysmal A-V nodal tachycardia in V-5.

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Severe neurodermatitis	●		
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Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information In SK&F literature or *PDR*. *Contraindications:* Comatose states or the presence of large amounts of C.N.S. depressants. *Precautions:* Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. *Side Effects:* Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories SK&F

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Double Contrast Barium Cystography

ERICH K. LANG, M.D.
*Indianapolis**

A 76-year-old white male was admitted to Methodist Hospital because of massive hematuria. Cystoscopy was performed on an emergency basis and the cystoscopist identified the orifice of what appeared to be a large diverticulum. Profuse bleeding from the diverticulum was noted. An attempt to selectively advance the cystoscope into the diverticulum failed because of the profuse bleeding. An intravenous pyelogram revealed the upper urinary tracts to be unremarkable. Bimanual examination under anesthesia revealed the prostate to be of normal size and consistency. A large mass, presumably the diverticulum, was readily palpable in the right half of the true pelvis.

A double contrast barium cystogram was performed for further delineation of the diverticulum and assessment for any possible tumor masses within it. The double contrast barium cystogram readily revealed a huge diverticulum occupying the entire right half of the true pelvis, much larger in size than the bladder itself, displacing the bladder to the left half of the pelvis (Figure 1). The diverticulum communicated with the bladder through a relatively narrow opening of approximately 1.5 cm. width. Several large mass lesions were coated with barium and silhouetted against the air-filled diverticulum in the left lateral decubitus position. These masses are identified as tumors originating in and confined to the diverticulum. No tumor could be identified in the bladder. The examination established a definitive diagnosis which is difficult to make on the basis of cystoscopic examination because of obscuring by massive and diffuse bleeding.

* Radiologist, Methodist Hospital, Indianapolis 46207.

Comment

Double contrast barium cystography was popularized by Doyle who standardized the roentgenographic projections and barium mixture best used for this procedure. Two ounces of Steripaque or sterile finely-ground barium are mixed with four ounces of sterile saline or water. The mixture is injected into the bladder after the bladder has been meticulously drained of urine and blood by rotating the patient in various decubitus positions and aspirating through a Foley catheter. After the barium mixture has been injected, the patient is again rotated through the decubitus as well as supine and prone positions to allow contact of the barium mixture with all surfaces of the bladder. After this, the barium mixture is allowed to drain from the bladder with the patient in a supine position, allowing some 20 or 30 ccs. of residual barium mixture to puddle in the posterior recess of the bladder. One-hundred fifty to 200 ccs. of nitrous oxide are then introduced into the bladder to produce the desired double contrast study.

Films are then obtained in AP, oblique and various decubitus as well as upright positions.

This technic allows an excellent assessment of the mucosal contour of the bladder and any mass lesions projecting into the bladder lumen or a diverticulum of the bladder. Doyle has advocated assessment of infiltration of bladder tumors into the muscularis on the basis of observation of rigidity of the wall of the bladder. In our opinion this scope of the examination is better accomplished by arteriographic demonstration of the bladder tumor. The method, however, is recommended as an outstanding detail study of mucosal relief and the contour of any mass projecting into the lumen of the bladder. ◀



FIGURE 1

A double contrast barium cystogram in left lateral decubitus position demonstrates a small bladder displaced into the left half of the true pelvis and a huge diverticulum occupying the entire right half of the true pelvis communicating through a narrow neck. Tumor masses within the diverticulum are readily contoured against the gas and outlined by precipitated barium on the surface of these tumors.

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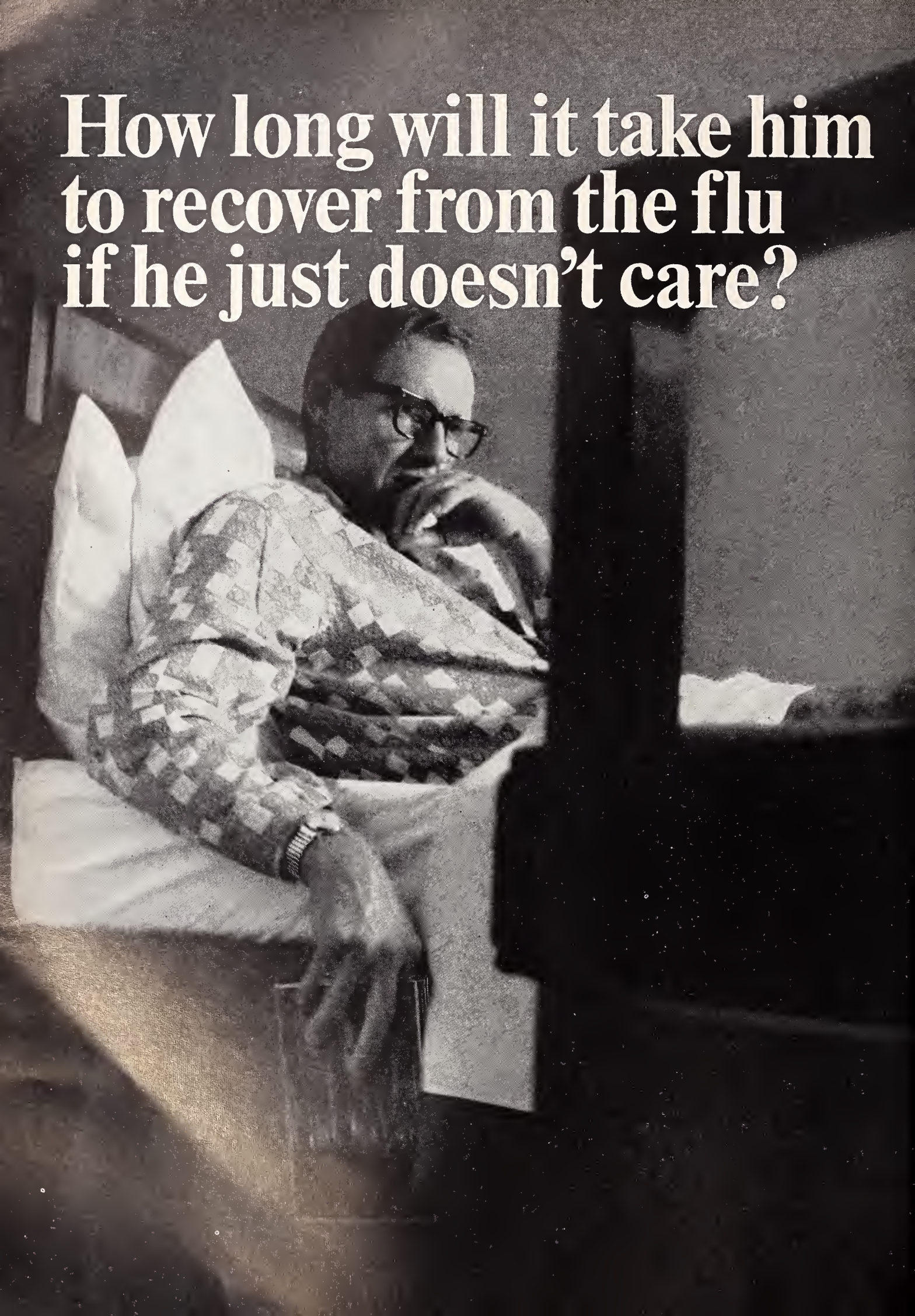
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*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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ASTHMA:

IMMUNOLOGICAL AND NON-IMMUNOLOGICAL

One of a series of case reports illustrating the differential diagnosis in patients with symptoms of asthma.

IRVIN CAPLIN, M.D.
JOHN T. HAYNES, M.D.
Indianapolis

A 34-year-old woman awakened early in the morning with a frightening wheeze in her chest. She was given ephedrine and epinephrine but obtained no relief. Because of a failure to respond to adrenergic drugs she was seen in consultation.

History revealed no previous episodes of nasal obstruction, sneezing, coughing or wheezing. Family history was negative for allergic disease. The night before she had been at a party where champagne was served. She had always been a teetotaler. After two glasses of champagne, she had to be taken home because of dizziness, nausea and stupor. She fell into a deep sleep, only to be awakened by a frightening wheezing which she had never had before.

Physical examination revealed a frightened woman with good vital signs and no obvious evidence of respiratory difficulty. Auscultation of the chest revealed wheezing only on the right side. A chest x-ray (Figure 1) demonstrated a partial dental plate which she had aspirated into the right main stem bronchus. This was removed by bronchoscopy with complete relief.

Case Report #2

A ten-month-old female infant was seen because of wheezing and fever of four days duration. Prior to this episode, she had been in good health. Inspiratory and expiratory musical rales could be heard throughout both lung fields. A chest x-ray (Figure 2A) revealed an atelectasis of the right lower lobe. She was treated with antibiotics, iodides, fluids, oxygen and epinephrine. On her second day of hospitalization, after a severe paroxysm of coughing, she coughed up a peanut. Her fever and toxicity were gone the next morning. A chest x-ray taken two days later (Figure 2B) showed the atelectatic lobe to be completely re-expanded. She has remained well.

Case Report #3

A one-year-old boy was seen because of a severe cough and wheezing of two days duration. Shortly before hospitalization he had had a severe chill. He had had colic until three months of age.

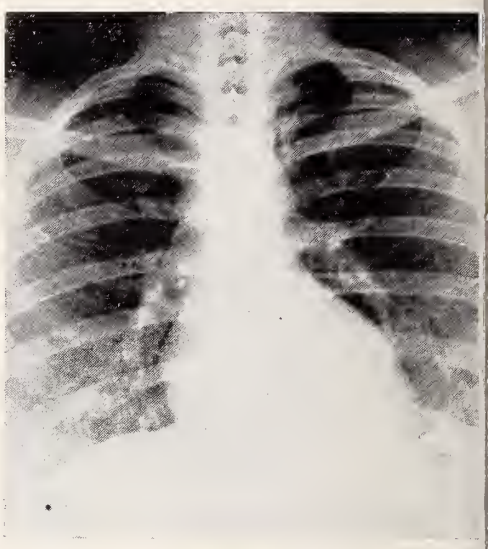
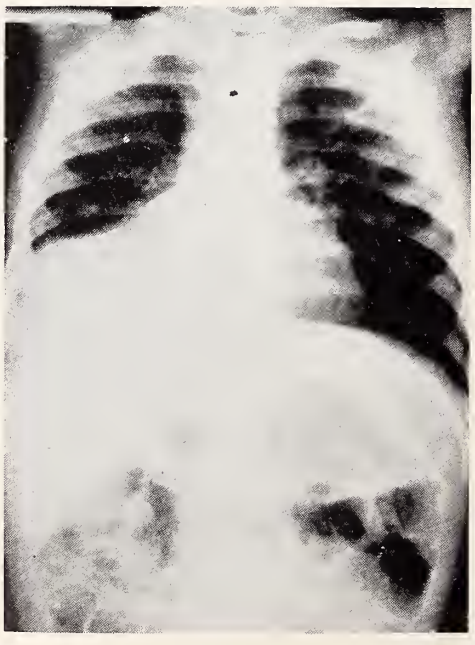


FIGURE 1
A PARTIAL dental plate is visible in the right main stem bronchus.



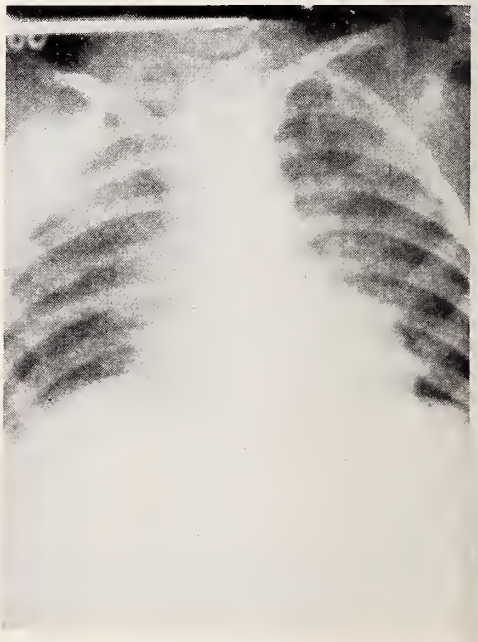


FIGURE 2A and B
ATELECTASIS of left lower lobe from non-opaque foreign body (A). Two days after coughing up a peanut, there is re-expansion of the atelectatic lobe (B).

lis father suffered from asthma.

Physical examination revealed a oxic-looking child with an irritating ough, audible wheezing, tachycardia 120) and fever (102.8° F). Inspira- ory and expiratory musical rales were eard throughout both lung fields. A hest x-ray (Figure 3) revealed a rela- ve emphysema of the left lung. At ronchoscopy a peanut was removed rom the left main stem bronchus with mplete recovery.

The last three cases all describe for- ign bodies. Case #1 describes a ietallic and plastic foreign body which roduced unilateral wheezing. The next vo cases demonstrate non-opaque

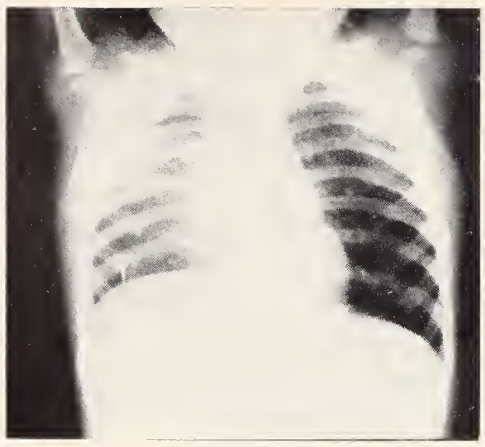


FIGURE 3
NON-OPAQUE foreign body in left main stem bronchus with ball-valve emphysema of left lung.

foreign bodies of vegetable origin. For- eign bodies of vegetable origin frequently cause a violent tracheobronchitis with cough and irregular fever[1] which were present in these latter two cases. In one, we have obstruction-producing atelectasis, and in the other, a ball-valve emphysema. In all three cases an erroneous diagnosis of allergic asthma had been made.

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POST GRADUATE SYMPOSIUM ON RHEUMATIC DISEASES

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Path-finder
PUBLISHED UNDER THE AUSPICES OF THE INDIANA ASSOCIATION OF PATHOLOGISTS

This series is intended to emphasize the importance of judicious selection and proper interpretation of newer laboratory procedures as applied to differential diagnosis of various diseases. It is edited by Leon L. Blum, M.D., Terre Haute.

The Concurrent Determination of Urinary 17-Ketogenic Steroids and Total Neutral 17-Ketosteroids

HENRY T. RUSSELL, M.D.
HELEN RAYMER, M.T., (A.S.C.P.)
OTTO E. LOBSTEIN, Ph.D.
*Lafayette**

THE determinations of steroid hormones in the hospital clinical laboratory are a necessity in the present day practice of medicine. The information obtained from both 17-ketosteroids (17-KS) and 17-ketogenic steroids (17-KGS) determinations is necessary in the evaluation of adrenal cortical function and other clinical states in which these hormones are produced in abnormal quantities.

The flowsheet of biosynthesis as shown in Figure 1 will make the correlation of the various steroids clearer. On this flowsheet, all 17-OH compounds are arranged on the right side and their chemical analogs, not containing a 17-OH group, are arranged on the left side. Except for the hydroxy group on the C-17 position, these respective pairs of analogs are identical.

The terms 17-KGS and 17-OH corticosteroids are used very loosely in the literature. They may convey different meanings to the clinician and to the laboratory worker. Briefly, our usage of these terms is based on the following facts referring to the flowsheet (Figure 1). The Porter-Silber reaction includes compounds, S, F, and E. It does not include 17-OH progesterone which is the intermediary to the androgens from progesterone. It further does not include pregnanetriol. Hence if there is a functional block at the 21-hydroxylation, compound S cannot be formed from 17-OH progesterone. Consequently cortisol and cortisone cannot be formed either. Yet it is exactly these two compounds which inhibit the pituitary gland from producing ACTH. Thus more and more ACTH will be formed resulting in an accumulation of 17-OH progesterone, yet the Porter-Silber chromogens will be normal. These chromogens are often called 17-OH corticosteroid which is only partially true since preg nanetriol and 17-OH progesteron chemically also are 17-OH steroids bu not included.

The term 17-KGS means precurso of the 17-KS which stems from the fac that the 17-OH progesterone is one c the precursors of the androgens, whic are chemically 17-KS. Thus 17-OH co ticosteroids are 17-KGS and the term are used interchangeably by almo everyone.

Thus 17-KGS (17-OH cortic steroids) would be *total* 17-OH co ticosteroids since we include pregnan triol and 17-OH progesterone nov This we find to be true in the fun tional block mentioned above whe the pregnanetriol would also b elevated since everything above con pound S is dammed back, so the inte mediate and androgenic products b

* From the Department of Pathology, St. Elizabeth Hospital, Lafayette, Ind.

ome elevated. 17-OH progesterone, the ntermediary of the androgens (17-KS) vill be converted into 17-KS, resulting n their elevation. Thus in adrenal ortical hyperplasia, not associated vith a tumor, we find elevated preg-anetriol, elevated 17-KGS, but normal Porter-Silber chromogens, and elevated 7-KS. This has been reported in the iterature.

Another interesting example is the tein-Leventhal syndrome where one inds high 17-KS, normal 17-KGS, and ow estrogens. Here the 17-KGS are ormal since the adrenal cortex is unctioning normally. The elevated 17-KS come from the ovary which is unble to convert androgens to estrogens —the final step in their biosynthesis. Thus the inhibitory function of the strogens (hypothalamus) on the nterior pituitary to produce FSH is nissing and more and more androgens re made in the ovary.

It is thus well to keep in mind that he 17-KGS test is the better of the two or evaluating adrenal cortical function. By doing a combination of these ests, the functional block can often e localized. Furthermore, it should e remembered that neoplasia or hyerplasia in the adrenal cortex or the onads not only results in increase or ecrease in the expected endproducts of iosynthesis (i.e., increased 17-KGS in drenal cortical hyperplasia) but also, n certain cases, results in functional locks of the normal pathways of iosynthesis yielding increased interediaries that would not ordinarily be xpected (i.e., increased 17-KS in ranulosa cell tumor).

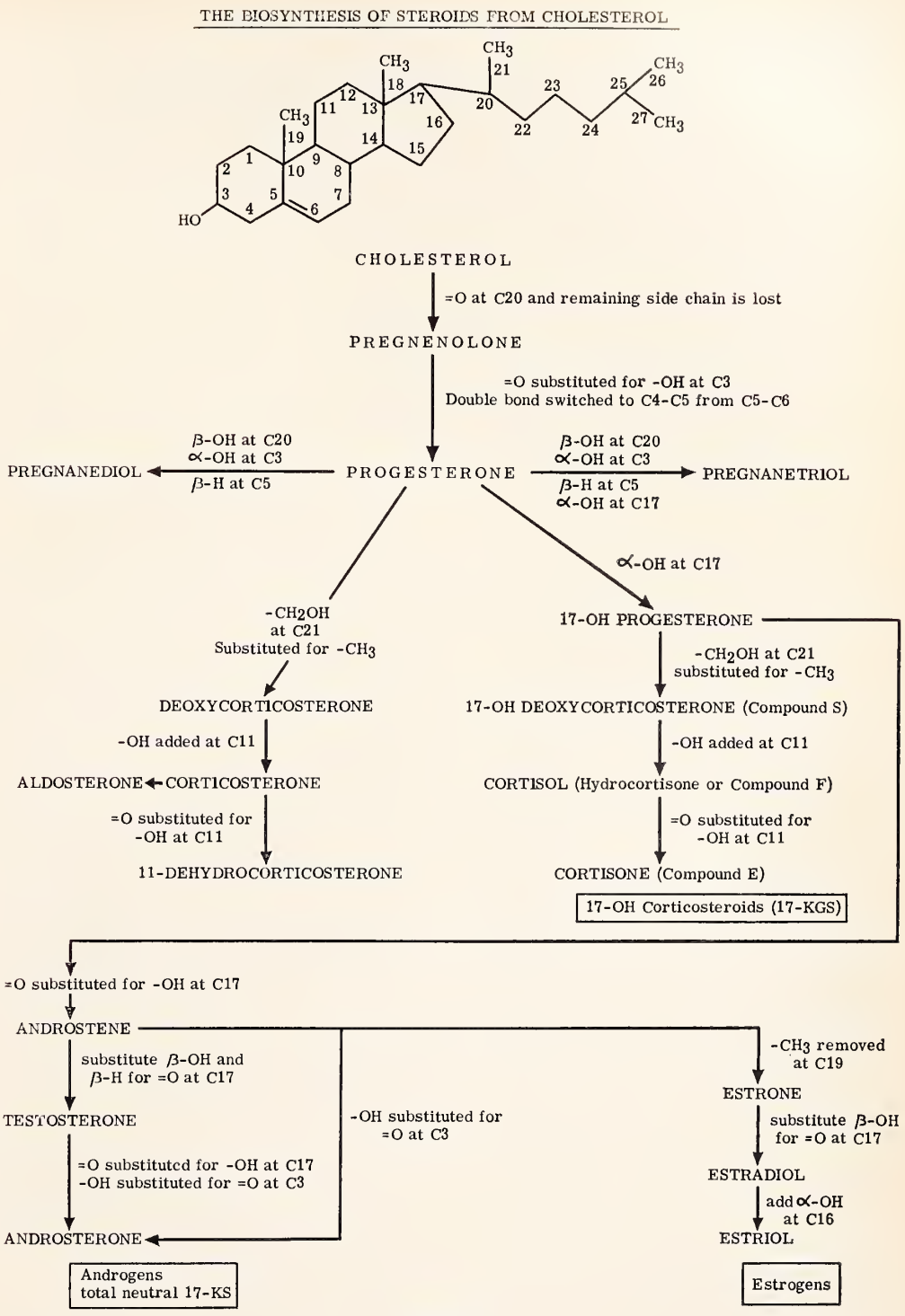


FIGURE 1

Summary

The concurrent determination of urinary 17-ketogenic steroids and total neutral 17-ketosteroids provides the physician with the additional data necessary for differential evaluation of adrenal cortex activity, ovarian insufficiency and other conditions.

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The Journal
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The Journal Welcomes Two New Features

A new *Journal* feature, "The Cancer You View" will make its initial appearance next month in the annual Cancer Issue.

While April has, for many years, been devoted to special cancer issues and special activities on the part of voluntary organizations, it is no more important in the diagnosis of cancer than any other month. In a doctor's office every month is cancer month—every day is cancer detection day.

In line with this philosophy, "The Cancer You View," an abbreviated exposition on the early detection of cancer, or rather the detection of early cancer, will be a monthly feature. It is made possible by the academic activities and financial assistance of both the Methodist Hospital Graduate Medical Center in Indianapolis and the American Cancer Society, Indiana Division.

It will be written by various authorities from within and without the Methodist Hospital Center and will be edited by Dr. Edwin E. Pontius.

Another monthly cancer article which will appear for the first time next month will be devoted to the story of cancer research in Indiana.

Investigative activities in the state have been encouraged and nurtured financially by the Indiana Division of the American Cancer Society for many years. Individual projects have varied from highly practical problems to the purest type of research.

The lead-off article by Dr. George Weber will deal with his work on the regulatory mechanisms and enzymological processes in cancer cells. He will describe the variations in intracellular metabolism which distinguish neoplastic cells from normal cells—the basic facts of cellular metabolism which may be the basis for selective chemotherapy of malignancy.

Subsequent research articles will continue with the story of investigations which are probing deeper and deeper into the body of knowledge which will provide the basis for man's conquest of neoplastic disease.

The Journal welcomes these two features, expresses its gratitude to their authors and sponsors and commends them to its readers.

Indiana Receives Regional Planning Grant

THE state of Indiana has been chosen as a planning region within the national program to combat heart disease, cancer, stroke and related diseases.

The objective is to develop a plan of action which will enhance the dissemination of clinical and medical research knowledge to practicing physicians throughout the state and to help them provide patients with the optimum in modern medical care.

The cooperative planning program is financed by a grant of $821,50 from the Division of Regional Medical Programs of the National Institutes of Health, United States Public Health Service.

The regional planning grant is a program with its own special aims and leadership. However, its ultimate objectives and many of the central elements coincide with the concept around which the Indiana University plan for state-wide medical education is structured.

The state-wide medical education plan is vital now, to increase the number of top flight internships and residencies in the state and thereby increase the number of physicians who choose to practice in Indiana. The Indiana University plan is important whether or not we eventually establish additional medical schools within the state. The state-wide educational plan would do more to promptly improve continuing education for all physicians than would the advent of another school. The joining of undergraduate intern, residency and continuing education in multiple cooperating commu

ity hospitals throughout the state will help create a medical environment capable of attracting and retaining physicians in Indiana. This is necessary no matter how many schools the state supports, or how many graduates we have each year.

The central objective of the I.U. state-wide plan is to advance responsive, modern medical education and thus increase the number and improve the distribution of practicing physicians in Indiana. It will strengthen graduate medical education and establish new concepts of continuing medical education in cooperating clinical centers over the state.

A Regional Advisory Group of leading Indiana citizens has approved studies and demonstration projects aimed at identifying and meeting the special health needs of the state. The graduate education plan was an important factor in gaining acceptance of the regional planning grant.

The members of the advisory group are listed below. Among the institutions already expressing a desire to take part are hospitals and clinics in Bluffton, East Chicago, Evansville, Fort Wayne, Indianapolis, Lafayette, Marion and Muncie. Cooperating organizations include the State Board of Health, the Indiana Heart Association, the Indiana Division of the American Cancer Society and the Indiana State Medical Association.

The Regional Advisory Group will provide leadership for the two-and-a-half-year planning activity. Headquarters will be at the Indiana University Medical Center. An important concern will be the development of a state-wide educational communications system employing interchange of faculty as well as electronic devices.

The following specific planning projects are about to begin:

Collection and analysis of data on Indiana's future needs for medical manpower and facilities.

Planning for a state-wide system of graduate and continuing medical education in heart disease, cancer and stroke.

Planning for a network of coronary care units to serve a maximum number of Hoosiers, including those in remote communities.

Development of a Pediatric-Cardiac Registry, which will make data instantly available on the extent and nature of heart disease among children in the state.

A feasibility study to encourage physician participation in diagnostic and preventive medicine.

A demonstration project to identify medical problems among people in low income neighborhoods.

Members of the Regional Advisory Group for Planning are:

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Glenn W. Irwin Jr., M.D., Dean of the School
George T. Lukemeyer, M.D., Associate Dean of the School
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"Project Head Start"

"PROJECT HEAD START" is probably the most promoted of any of the "poverty programs" with the possible exception of the "Job Corps." "Head Start" is one of the Community Action projects under the Economic Opportunity Act, or the so-called "war on poverty."

Some "Head Start" programs are already active and others are in the process of development in Indiana. They consist of subsidized pre-school "educational programs" which are intended to provide underprivileged children with some of the necessary background to make it possible for them to start the regular school curriculum with better orientation than they are said to have had in the past.

This matter is being brought to the attention of the medical profession because in some communities individual physicians and the medical societies are being asked to provide services for the children in the "Head Start" programs, either free, at a reduction, or in some cases at regular fees.

Certain basic health examinations are required by the federal government before the local projects can be funded. At first funding was at the rate of 90% federal funds to 10% at the local level, and lately the local level has been required to provide 20% either in the form of dollars or equivalent in services. Many physicians have been asked to provide their services for the project, the value of the services being equated as part of the local subsidy.

In some instances the county medical society concerned has objected to the basic principle of federal programs of this sort, in which case individual physicians have been requested to provide the services as personal contributions to the dollar value of the local subsidy.

There is no question that the decision as to how to approach this matter is finally the prerogative of either the county medical society or the individual physician, but sometimes the circumstances and basic philosophy involved are not known at the time the request for assistance is made. —L.G.M.

Guest Editorials

The AMA Convention—and Why We Go

BUCKMINSTER FULLER, the American architect-engineer-philosopher-poet, has predicted that education will become the largest and most important of all industries.

He bases this on a belief that knowledge is the one resource of man which not only cannot be depleted, but can, indeed, be consciously increased. In the advanced, automated world of the near future, he says, "leisure" time gained from the workday world through automation may be spent in the classroom; in fact, people may be paid to go to school.

Physicians have long understood the value of knowledge—of education.

We are forever involved in the task of "keeping up"—without pay it may be noted.

There are few physicians who regard the task as onerous, however. "Keeping up" is part of being a physician; it is a privilege and a responsibility.

A number of reservoirs of medical information may be tapped by the physician. These include colleagues, medical journals, medical news publications, continuing education courses, medical meetings and conventions, drug detail men and miscellaneous others.

Every year there is the "big show" where the physician can tap practically every reservoir: the annual convention of the American Medical Association.

At the 1966 annual convention about 600 scientific papers were presented, and nearly 300 scientific exhibits were on display as well as hundreds of industrial exhibits.

No other medical meeting in the world matches the range of subjects presented, from reviews of general medicine to experimental medicine and therapeutics.

The 116th annual convention of the American Medical Association will be held in Atlantic City June 18-22 this year. Convention Hall and surrounding hotels will house the scientific program; the House of Delegates will meet at the Chalfonte-Haddon Hall Hotel.

Among special presentations planned are four general scientific sessions on backache, healing, patient care and sex.

The 22 scientific sections will offer programs individually, and many will hold joint meetings on subjects of common interest. A full schedule of medical motion pictures is planned. At least five color telecasts will be broadcast, live from a Philadelphia hospital in cooperation with the University of Pennsylvania School of Medicine.

If knowledge is a resource, as Buckminster Fuller says it is, the AMA annual convention is surely a mother lode.—**Suggested editorial from the AMA.**

Memo From The Editor

THOSE who touch this lower right-hand base once in a while may have gathered the limited extent of our affection for "Medicaid" — the word New York has pasted on Title 19 of Medicare. Now we learn that California prefers "Medi-Cal" although there's some talk of a substitute program for California's Title 19, this one to be dubbed "Cal-Med."

With little likelihood of beating Medicaid or Medi-Cal and with a real risk of beating the subject to death.

e explored the possibility of an individual Title 19 sobriquet for each ate. With some liberties taken, and ith some doubling up, they follow:

Medicala, Medical (Alaska and Calirnia), Medicar, Mediark, Medicol, Iedicon, Medidel, Medifla, Mediga, Iedihaw, Medicida, Medicill, Mediind, Medicia, Medikans, Mediky, Iedila, Medime, Medimary, Medimass, Iedimich, Medimin, Medimiss, Meimo, Medimont, Medineb, Medinev, Iedinew (Hampshire, Jersey, Mexico, nd York), Medinorth (Carolina and)akota), Medicohio, Medicokla, Medior, Medipenn, Medicri, Mediso (Carona and Dakota), Meditenn, Meditex, Iedicut, Mediva, Mediver, Mediwash, Iediwes, Mediwis, Mediwy, and for ıe Commonwealth, Medipu, and for ıe capital, Medidist.—**James E. Iague, Editor,** *Hospitals* **41:5, 967; reprinted with permission.**

:ditorial Notes...

Metropolitan Life Insurance tatistics show that life expectancy t birth for the period of 1959 to 961, the latest period for which igures are available, for the entire Jnited States was 67.5 years for hite males and 74.2 years for hite females. Indiana figures were ıe same for white females, but a little etter (67.7 years) for white males.

New York University Medical Center reports research results to ndicate that massive doses of maerial obtained from certain trains of heat-killed streptococci nd staphylococci may overwhelm the body's natural reaction to foreign tissue without altering the body's resistance to disease. The technic is being studied for application in skin grafting and organ transplantation.

Blood cells from a patient with chronic myelogenous leukemia have been grown in a long-term tissue culture for the first time by scientists at the National Cancer Institute. The distinctive Philadelphia chromosome is observed in 23% of all the cells, and in addition a virus particle is seen in a large number of cells. The particle is structurally identical to the particle which has been observed in the cultured cells of Burkitt's lymphoma.

Pitman-Moore and the Indiana Air National Guard were influential in the delivery of an emergency supply of Veralba to a patient recently. A physician in Nassawadox, Virginia, near Norfolk, called late one night because of a patient in hypertensive crisis following cesarean section. Two hours after the call was received in Indianapolis a T33 jet trainer, piloted by Lt. Col. Earl S. Higbie, out of Hulman Field, Terre Haute, touched down at Weir Cook for the medicine. By 5:30 a.m., the drug was delivered at Langley Air Force Base and was soon at Nassawadox. The patient is reported to be doing nicely.

In 15 years, the percentage of foreign-trained doctors serving as interns in U. S. hospitals has risen from 10.3 to 24.4, with an average proportion for the period at 20.6%. Residencies filled by foreign-trained physicians amounted to 9.3% in 1950 and were up to 28.8% in 1965, with an overall average of 22.7%. The absolute number of foreign-trained doctors has increased enormously, especially in the residency class, since the number of residencies has increased from 14,495 to 31,687.

Now it is reported that there are two major factors relating to mortality in men with coronary occlusions. One is smoking, the other is exercise. The more you smoke and the less you exercise, the higher the death rate. Both factors, of course, exist in innumerable combinations. The least active nonsmoker is, however, nearly twice as likely to experience a fatal occlusion as the more active smoker. And inactive men who smoke have a rate nine times that of more active nonsmokers. Full report is by the Health Insurance Plan of Greater New York in the December 19 issue of *JAMA*.

Repeated dialysis of nitrogenous wastes by the "artificial kidney" technic has, up to now, required an indwelling arterial cannula. Recently the VA has been able to create an arteriovenous fistula in an accessible location and cannulate the vein and artery with ordinary intravenous needles. Patients with the permanent indwelling cannulae tended to be apprehensive concerning it and sometimes developed inflammation at the site. With the removable and reinsertable needles, the patient has no external paraphernalia to worry him between dialyses. The new method is reported to have been used in 13 patients to a total of 800 times since July, 1966. ◄

President's Page

Dear Doctor:

As this letter is being written the General Assembly is nearing completion of its work for 1967. One of the greatest "snafu's" within the General Assembly was the questionable need for a new medical school and the location of same if such a need were shown. Here we saw a division of medicine demonstrated to the utmost. Groups in six different locations were trying to persuade the legislature that the medical school could best be placed in their community.



Physician members of the Indiana State Medical Association in each of these communities have worked hard for their own community. The Indiana Plan was nearly scuttled because of this division. Here there are medical educators who feared domination by Indiana University School of Medicine. They felt this domination so strongly that they were willing to allow a hospital administrator to help make policies for medical education in our state. These divisions at the legislature were costly to us. Much more could have been accomplished had medicine had a united front. Christ said, and Lincoln copied "a house divided against itself cannot stand." Our house in this legislature was divided against itself.

I would hope that the next two Indiana State Medical Association conventions would take into consideration whether or not there is a need for a new medical school and would actually sit down and present a united front as to where such a school should be located. This will mean that many of you will have to decide not what is best for your community but what is best for all the patients in Indiana. We will have to decide what is best for improvement of patient care in the state. We will have to decide that which is best to hold physicians within this state. We will have to decide that which is best to attract them in this state. The state medical organization should have a unified plan of action. If we do not have a unified plan, hospital administrators and other lay people will decide our fate for us. This great void was especially noticeable during the last state legislature.

I wish to take this opportunity to express, on behalf of the entire association, our extreme thanks to Howard Grindstaff and Robert Amick for their tireless work during the legislature. I have watched these gentlemen work and have been very impressed with their opinions and their contacts. We, in medicine, so many times take their visits to our counties for granted. I think it would be well if physicians in each of the districts would be willing to go with these men when they visit representatives and the senators to the state legislature. Again I wish to thank them for their devotion and the long hours they have spent on our behalf.

I sincerely hope that you are able to purchase a new suit or have the old one cleaned and that your auxiliary member has a nice new Easter bonnet.

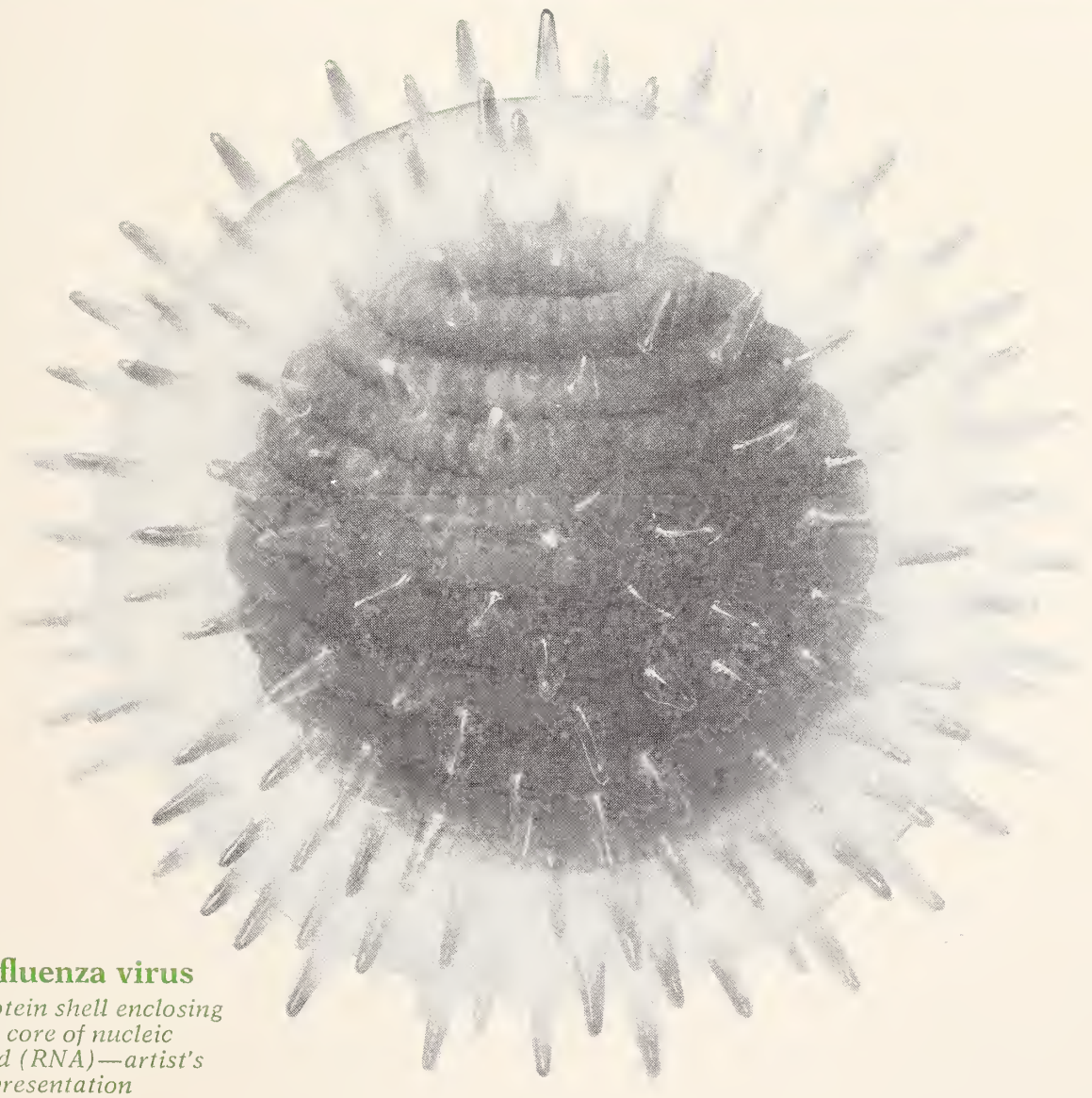
Eugene S. Kiefer M.D.

New from Du Pont

Symmetrel®

(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

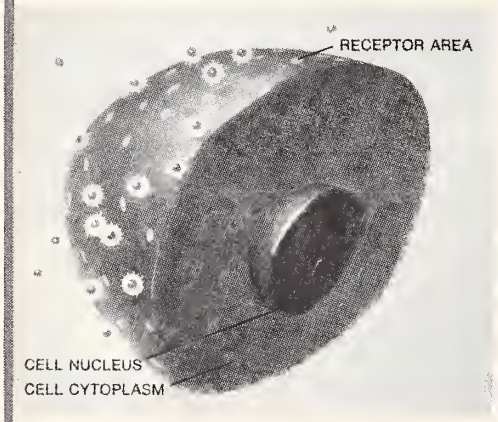
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

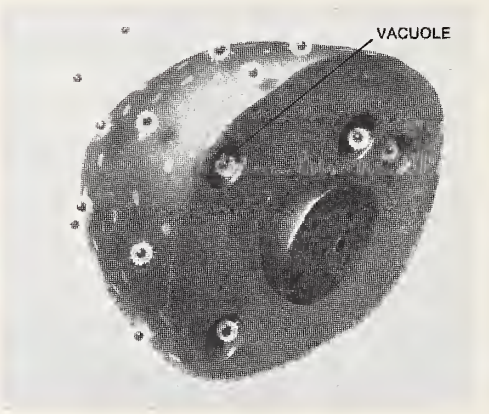
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

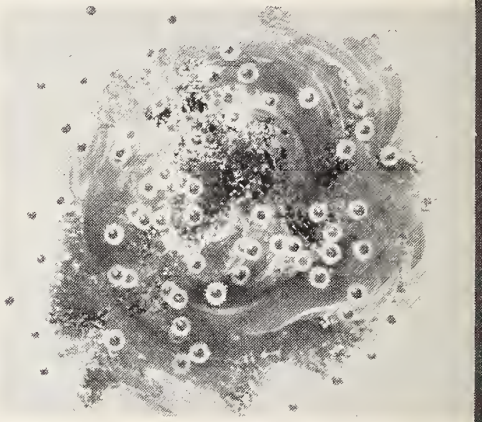
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

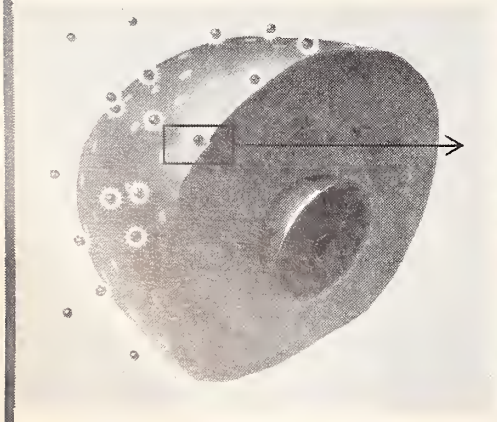


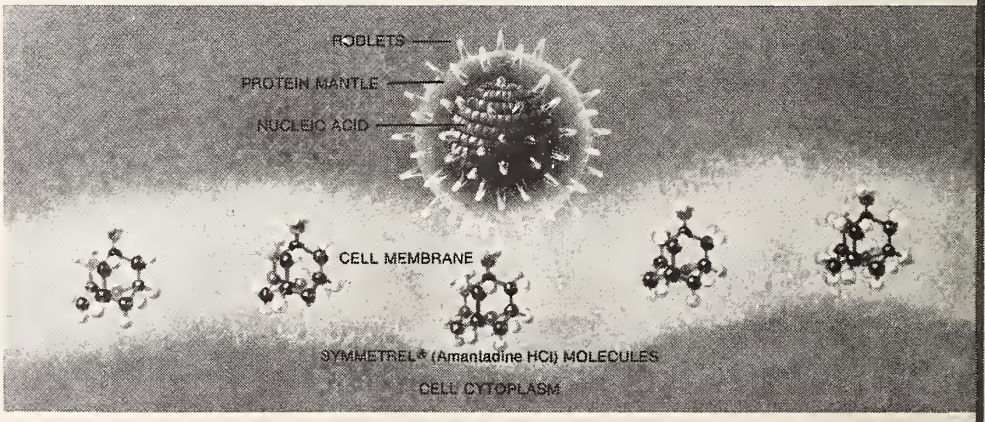
2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]





Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

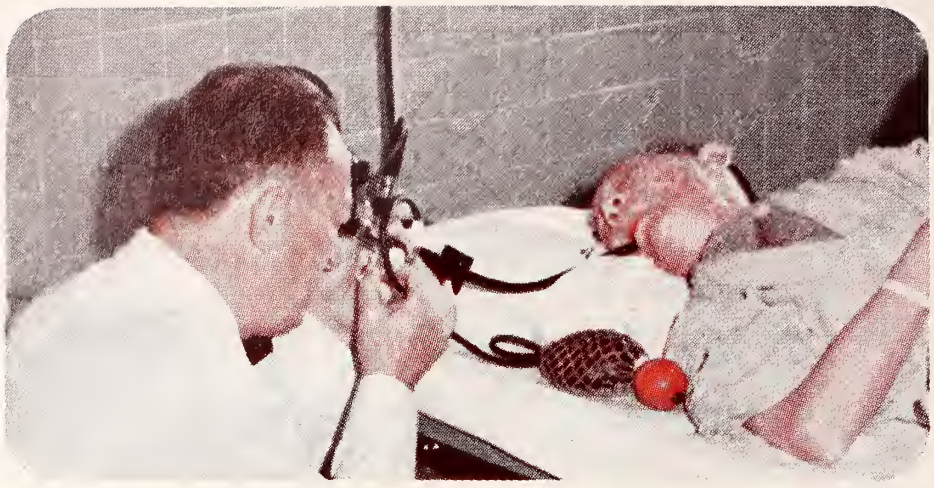
How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

DUPONT
REG U S PAT OFF

Symmetrel®

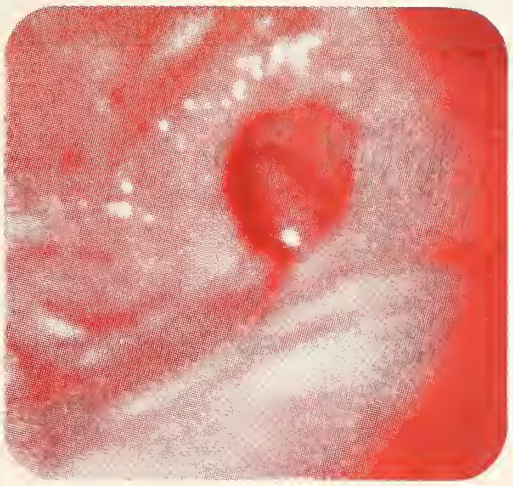
(Amantadine HCl)

A molecular barrier to virus penetration



NEW EVIDENCE:

Pro-Banthīne® (propantheline bromide)
gives positive, selective benefits in gastrointestinal disorders.



Intragastric photograph of pyloric region showing complete relaxation of pyloric sphincter with 6 mg. of Pro-Banthine intravenously.

AN IMPORTANT PROBLEM in managing gastrointestinal disorders has been the choice of an anticholinergic agent which will act positively and selectively on the gastrointestinal tract without extensive secondary effects.

Recent direct observations with the cinefibergastroscope and intragastric photography[1] visually confirm previous evidence that Pro-Banthine does, indeed, possess such selective activity.

Barowsky and his associates demonstrated that a minimal dose of 6 to 8 mg. of Pro-Banthine intravenously produced complete relaxation of gastric activity. Secondary effects were not significant.

By contrast, it required 0.8 mg. or double the usual dose of atropine intravenously to achieve similar gastric relaxation. Side effects of this dosage of the belladonna alkaloid were pronounced. Ventricular rates were as high as 150 per minute.

For positive, selective anticholinergic benefits Pro-Banthine is indicated in patients with peptic ulcer, gastritis, irritable colon and other forms of gastrointestinal hypermotility.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type ampuls of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

Contraindications: In glaucoma or severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in the elderly male with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug.

Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

1. Barowsky, H.; Greene, L.; Bennett, R., and Buganza, G.: The Effect of Anticholinergic Drugs on Gastric Motility and Pyloric Function, Scientific Exhibit, Annual Convention of the American Medical Association, Chicago, Illinois, June 26-30, 1966.

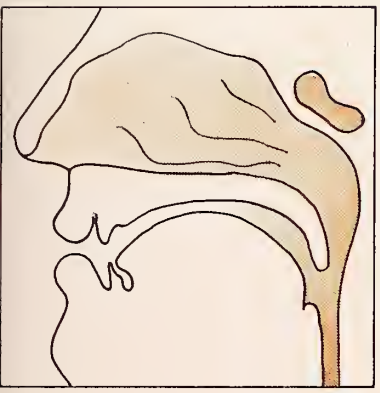
SEARLE *Research in the Service of Medicine*

When the battle with bacteria is in the upper respiratory tract

Routes of invasion through the oral and nasal passages to the nasopharyngeal mucosa: artist's depiction of sagittal section of head in perspective.



consider Gantanol (sulfamethoxazole)



To rapidly help the patient win against upper respiratory infections

When the respiratory tract has been invaded, an antibacterial that can assure effective yet generally uncomplicated therapy is your first line of defense...an agent such as Gantanol (sulfamethoxazole), the wide-spectrum antibacterial from Roche.

Gantanol (sulfamethoxazole) is effective against common susceptible upper respiratory pathogens, both gram-positive and gram-negative. Acting at foci of bacterial invasion, Gantanol (sulfamethoxazole) promptly helps control most infections, yet usually presents few problems to patients. Dosage is convenient and provides a measure of economy.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How supplied: Tablets, 0.5 Gm, bottles of 50.

Roche Laboratories, Division of Hoffmann-La Roche Inc., Nutley, N. J. 07110

When there are bacterial invaders in the upper respiratory tract

Gantanol®
(sulfamethoxazole)

ROCHE



"Yes, Doctor, the pain is gone."

Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. ½ No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

Keeps the Promise of Pain Relief

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.

The Woman's Auxiliary

REPORTS TO ISMA

It is gratifying to note in *The AMA News* of Jan. 9, 1967 that two state medical societies have become sufficiently concerned to launch state-wide venereal disease educational and control programs. In Michigan, the P.T.A. and the state medical society are cooperating to educate students, teachers and parents about the threat and control of V.D. This is thought to be the first project of its kind in the nation. The Texas Medical Association is preparing for an intensive V.D. education and control campaign. In late January, a Joint Action Conference on Venereal Disease was sponsored by the T.M.A., Texas Department of Health, Junior Chamber of Commerce and the P.T.A.



An extensive brochure on venereal disease has been prepared by the National Board of our Woman's Auxiliary as a part of this year's program material. It is available for use in collaboration with other groups concerned with this problem.

In the field of "care for the aging," W.A.-A.M.A. has prepared three brochures which are available from the Chicago office. These are Homemaker Service, Volunteer Friendly Visitor Training and Meals-on-Wheels. As of July, 1966, there were 510 Homemaker Services in existence in the United States, New Jersey and Connecticut having more overall coverage than other states. Indiana is listed as having 11 agencies.

The Volunteer Friendly Visitor program is a community service designed to bring "friendship and understanding to chronically ill, homebound patients of all ages, with special emphasis on the elderly." The Oregon and New Jersey State Boards of Health have published detailed handbooks to "assist volunteers, communities, organizations, groups, nursing homes and homes for the aged."

Mrs. Asher Yaguda, President of the Woman's Auxiliary to the AMA, is state committee chairman of this program in New Jersey and has given many years of devoted service toward organizing a tremendously successful program. Mrs. Yaguda will be the national representative at our House of Delegates, meeting in Evansville April 18-20. Every Hoosier doctor's wife who hears her speak will carry back to her county a wealth of information and enthusiasm and an image of dedication.

The third above mentioned type of community service, Meals-on-Wheels, began in England during World War II when the Women's Volunteer Services delivered food to the victims of the "night bombings" and the elderly. During the 1950's Meals-on-Wheels was started in Philadelphia, Pa., Columbus, Ohio and East Orange, N.J.

A significant date to us is April 6, 1960, when the first auxiliary-sponsored Meals-on-Wheels was pioneered by the San Francisco Auxiliary. "A three-times a week effort, they deliver a hot meal, a cold evening meal and supplies for breakfast. Needy "clients" are referred by doctors, the homemaker service, visiting nurses, etc."

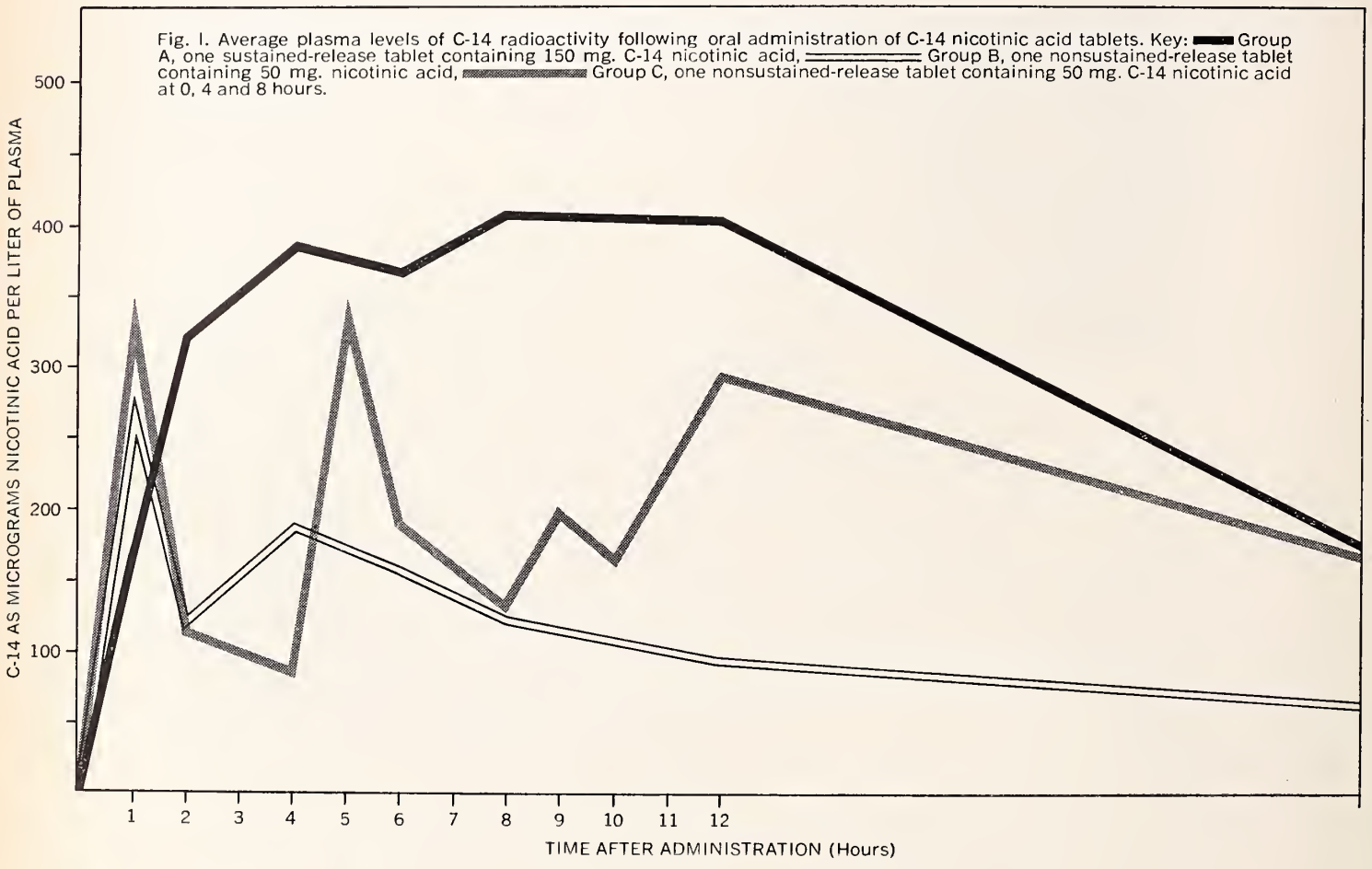
Our members in South Bend have, for some time, been participating in that city's extensive program, of which Miss Regena Marsh is executive director. The February issue of the *Elkhart County Pulse,* published by the Woman's Auxiliary to the Elkhart County Medical Association, carries a most enthusiastic and interesting article on their current plans for starting this program in collaboration with the Y.W.C.A. and the local chapter of Altrusa. A steering committee has been formed, representatives of the three organizations have visited South Bend Memorial Hospital to see the program in action and the Elkhart Auxiliary has donated the price of a hot oven — $125.

Doctors, we need your interest and support in these and other potential projects.

Mazo D. Scales

Sustained circulatory, respiratory and cerebral stimulation for the

Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.





(fewer absent doses by absent-minded patients)

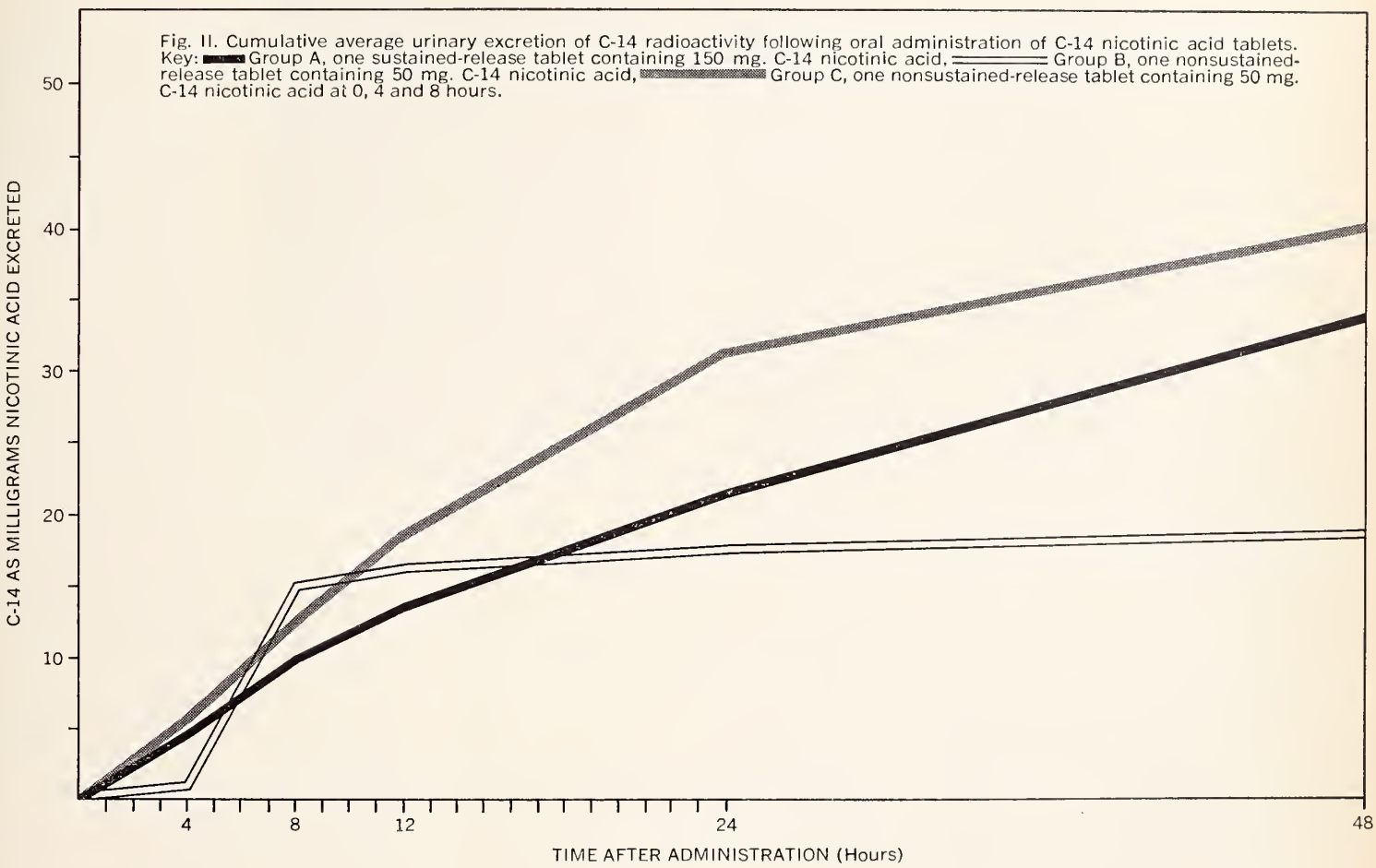
Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilatation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also, cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate, signs of senile confusion. Patients become more alert,

aged and debilitated



less confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and Pharmaceutical Industries Corp.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

News from the Indiana University School of Medicine

The beginning of what is expected to become a state-wide telephone hook-up for medical education started in January when Medical Grand Rounds for the Indiana University School of Medicine Hospitals was linked with five other hospitals—Ball Memorial in Muncie, Deaconess in Evansville, Union in Terre Haute, Gibson County Hospital in Princeton, and St. Vincent's in Indianapolis.

An attempt to start the network last October with the Muncie and Evansville hospitals met technical difficulties which rendered the system inoperative. The revised system has been tested and found to operate satisfactorily, according to Dr. George T. Lukemeyer, associate dean of the medical school who is in charge of the program.

Grand Rounds, a discussion of particularly interesting medical problems by the faculty, will be on the network at 11 a.m. each Wednesday. It will originate in the auditorium of Emerson Hall on the I.U. Medical Center campus in Indianapolis, where medical students, interns, residents and faculty discussion leaders of the day will be gathered. The telephone link is a "two-way hook-up" so that residents, interns and staff physicians of the various hospitals can participate in the discussion. Slides and other illustrative material are sent in advance to participating hospitals to be shown at the proper time in the presentation.

The hour scheduled for the last Wednesday in each month will be devoted to a clinical pathological conference, with Dr. Frank Vellios, chairman of the Department of Pathology, and Dr. Hunter Soper of the Department of Medicine, in charge. In the CPC conference, a protocol will be sent all participants in advance so that they will know details of the case under discussion. Selected conferences will be transcribed and in edited form will be submitted for publication in the monthly *Journal of the Indiana State Medical Association.*

The telephone network is the third in a series of programs inaugurated recently by the I.U. School of Medicine with the cooperation of local physicians to help broaden the base of medical education in the state. One, begun in January in Evansville with St. Mary's Hospital, is a visiting professor arrangement whereby a different medical school faculty member from Indianapolis will visit the hospital on nine selected Wednesdays between now and June 30, to participate in Medical Grand Rounds and discuss his specialty with interns, residents and other physicians in the area who are interested. When the current 10 visits have been completed, it is anticipated that the program will become an annual one with 20 visits per year.

A second program extending the services of the school of medicine began last October with a postgraduate course in neurology and epilepsy at St. Joseph's Hospital in South Bend. The course opened the new Frank M. Hall Neurology Clinic at the hospital, which will be staffed with I.U. specialists and will meet once or twice a month.

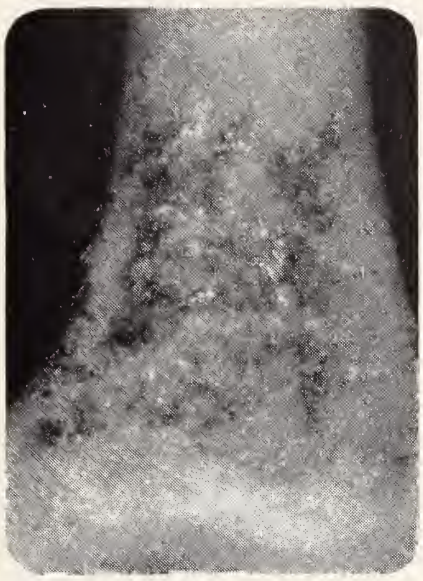
Within its present limited resources, the I.U. School of Medicine proposes to assist other local hospitals to broaden their medical education programs to help attract interns and residents to the hospitals and at the same time create a progressive medical climate that will help attract physicians to establish their practice in the area.◀

INDIANA MEDICAL BUREAU
816 Hume Mansur Bldg.
634-5804

A Licensed Employment Agency
Specializing in Medical Personnel

Our 16th Year Of Service

Eczema of many years... controlled in two weeks



Before treatment



After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

PHOTOGRAPHS COURTESY OF M. M. NIERMAN, M.D.

Aristocort® Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide
Also available in foam form.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

406-G





TABLETS

Equagesic®

(meprobamate and ethoheptazine citrate with aspirin)

Wyeth®

Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

Weighing on his mind, too

When pain evokes anxiety and tension, thereby heightening patient discomfort, a simple analgesic may only touch on part of the problem.

This single-prescription, nonnarcotic product, however, usually provides effective analgesia *and* helps put the patient's mind at ease.

WANTED: Locations Physicians

GENERAL PRACTICE

Daniel C. Keesee, 20 Midwood Dr., Florham Park, New Jersey

E. Grady Mills, 547 W. LeBelle Ave., Oconomowoc, Wis. 53066 (all correspondences to be marked personal)

SPECIALISTS

John D. Carbacker, 2155 Goodrich Ave., St. Paul, Minn. 55105—*Dermatology*

Muhammad A. Haque, 495 W. Prince Arthur St., Montreal, Quebec, Canada—*Ear, Nose, and Throat*

Paul J. Kadull, 305 W. College Terrace, Frederick, Md. 21701—*Internal Medicine*

Roger B. Johnson, 208 Belhaven, Daly City, Calif. 94015—*Internal Medicine*

Jorge Brodsky, 7404 Park Lee, Richmond, Va. 23234—*Internal Medicine—Gastroenterology*

Arthur R. Boberg, 8594 W. Villard Ave., Milwaukee, Wis. 53225—*Internal Medicine*

H. Ralph Schumacher, Jr., 33 Raldne Rd., Hyde Park, Mass.—*Internal Medicine*

Capt. Barry W. Steiger, U. S. Army Hosp., Cp. Zama, Japan, APO San Francisco, Calif. 96343—*Internal Medicine*

Ikrum Ul Haque, 277 Linwood Ave., Buffalo, New York 14209—*Neurosurgery*

Ziver Huner, 120 Camp Ave., Syracuse, New York 13207—*Ob-Gyn*

Russell C. Scott, 2727 Girard, Evanston, Ill. 60201—*Ob-Gyn*

Jose Huge Roig, Veterans Administration Hospital, Tuskegee, Ala.—*Ophthalmology*

James C. Callaway, 805 Cynthia Ave., Metairie, La. 70003—*Orthopedics*

Juan E. Olivera, 4200 Homer, Cincinnati, Ohio 45227—*Orthopedics*

Gerard T. Humma, 1223-D Scotts Manor Court, Odenton, Md. 21113—*Orthopedics*

Clarence E. Everhart, Jr., 319 University Ave., Elyria, Ohio 44035—*Pathology*

Said M. Zu'bi, American University Hospital, Beirut, Lebanon—*Pathology*

Christos A. Antoniou, 8056 Venetian Dr., St. Louis, Mo. 63105—*Pediatrics*

Robert W. Shultice, 348 Hawkeye Apartments, Iowa City, Iowa 52240—*Psychiatry*

Norbert Fleisig, 805 Templecliff Rd., Pikesville, Md. 21208—*General Surgery*

Leopoldo I. Pena, 627 W. 4th St., Lexington, Ky.—*General Surgery*

Richard J. Holloway, 339 Terrace Ave., Cincinnati, Ohio 45220—*Urology*

ADDITIONAL LOCATIONS

Carroll County—FLORA—population 1,727 with a projected census in 1970 of 2,900. Population retail trading area 12,000. Located 65 miles from Indianapolis, 20 miles from Frankfort and Kokomo and 25 miles from Lafayette and Logansport where hospital facilities are available. One practicing physician in community. Office and equipment available. Community Club Board working on a proposed modern medical center for two or three physicians and a modern community nursing home. Financial aid in community is available. Contact R. C. Julius, P. O. Box 67, Flora, Indiana 46929. Telephone (office) 967-4232 and (home) 967-4368.

Fayette County—CONNERSVILLE—population over 20,000—is equidistant (60 miles) from Indianapolis, Cincinnati and Dayton, Ohio. New recreation lake under construction—one of the largest man-made lakes in the country. All manufacturing concerns are enlarging and working full time. Eight active general practitioners for this rapidly expanding city. New 109-bed hospital run by a non-profit association. Contact J. L. Steinem, M.D., Secretary, Fayette-Franklin County Medical Society, 818 Grand Ave., Connersville, Indiana 47331.

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DR. RALPH V. EVERLY, chairman of the Executive Committee and the Building Committee, (left in picture) and James A. Waggener, executive secretary of ISMA, literally put the torch to the loan document.

January Meeting of the Council

IN a brief but jubilant ceremony at the winter meeting of the Council, Sunday, January 22, councilors and other officials of the Indiana State Medical Association observed the burning of the mortgage on the Headquarters at 3935 N. Meridian St., Indianapolis.

Dr. E. S. Rifner, president, told the assemblage that this financial obligation had been fulfilled one year in advance of schedule and cited the efforts of Dr. Ralph Everly, chairman of the executive committee, in making this possible.

"No one has worked so hard for the building in the past as has Dr. Everly," he said. "His efforts have benefited us all. It seems to me that he looks after the building and the grounds and comes over and talks to Jim as if it were his own home."

The building has served the medical profession well over the past few years. The Council, commissions and Executive Committee have carried on the work and programs of the association. The Woman's Auxiliary has utilized its resources and organizations allied to medicine have met in its chambers to deliberate problems in the health field.

Initial plans began on the building in 1957; ground was broken in April of 1961 and the building was officially dedicated in July of 1962.

Certificates of Humanitarian Service for volunteering their professional services in Viet Nam were awarded by the ISMA to four Indiana physicians during special ceremonies at the same Council meeting.

Honored were Drs. John J. Hartman, Angola; Andrew J. Bacevich, Hammond; Arthur H. Girod, Decatur and Daniel E. McLaren, Indianapolis. The doctors served 60-day tours of duty caring for the civilian population in Viet Nam's provincial hospitals.

Not present to receive their awards were Drs. Gilbert H. White, Jr., Hammond and C. Richard Bowers, Anderson, who is currently on his second tour of duty in Viet Nam. ◄



CERTIFICATES of Humanitarian Service for volunteering their professional skills in Viet Nam were awarded to four Indiana physicians January 22 at the winter meeting of the Council. Left to right are Doctors John J. Hartman, Angola; Eugene S. Rifner, Van Buren, president of the association; Lowell H. Steen, Whiting, chairman of the Council; Edwin Brown, Indianapolis, former national director of the volunteer program; Andrew J. Bacevich, Hammond; Arthur H. Girod, Decatur and Daniel E. McLaren, Indianapolis.



DR. LOWELL STEEN, chairman of the Council, poses with Dr. G. O. Larson, president-elect and Dr. Eugene Rifner, president. Dr. A. W. Cavins, Terre Haute, took all of the pictures on this page.



GATHERED at one of the luncheon tables in the basement were: Drs. P. J. V. Corcoran, Evansville; Joe Dukes, Dugger; Richard Wagner, Huntington; Edward J. Ploetner, Jasper; and Thomas G. Hamilton, Columbia City.



AT THE next table were (left to right) Judge Ralph Hamill; Drs. Lowell Hillis, Logansport; Lester Hoyt, Indianapolis; Robert M. Brown, Marion; James A. Harshman, Kokomo; Frank B. Ramsey, Indianapolis, Editor of The Journal; William R. Tindall, Shelbyville and Wilbert McIntosh, Riley.



ANOTHER group of doctors "caught in the act" by Dr. Cavins are: Drs. Robert M. Reid, Columbus; Peter R. Petrich, Attica; Donald M. Kerr, Bedford; William Clark, Fort Wayne; Frank H. Green, Rushville; Burton E. Kintner, Elkhart; George B. Gattman, Elkhart and Otis R. Bowen, Bremen.

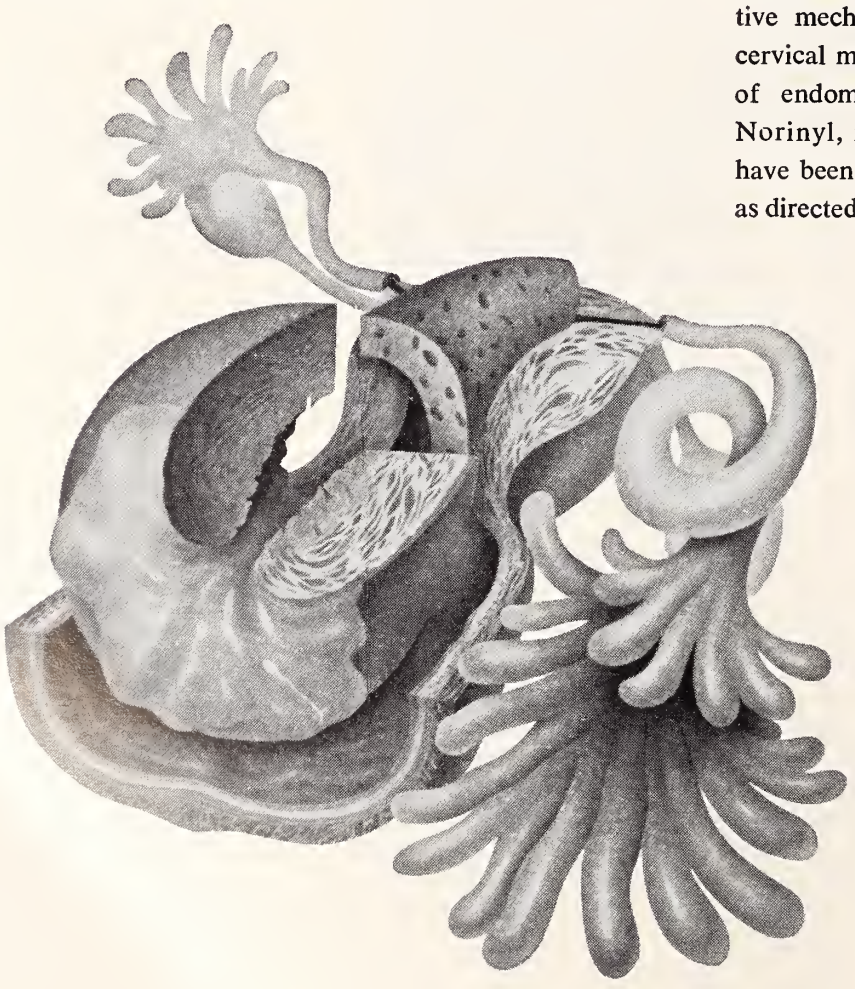
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Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Brvans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Person Injured in Accident Cannot Be Enjoined From Having Corrective Surgery Performed—A woman could not be enjoined from having a surgery performed, for the alleged purpose of correcting conditions caused by injuries sustained in an accident, until her suit for damages based on the accident was disposed of, a California intermediate appellate court ruled.

The woman was planning on having surgery performed on her neck and to have vertebrae fused. The person against whom the woman had brought her suit to recover damages for the injuries sustained in the accident sought to have her enjoined from having the surgery performed, until the damage suit was disposed of, on the grounds that the surgery was unnecessary, dangerous, and expensive, and that, if he should be held legally liable in the damage suit, he might be charged for unnecessary surgery and for any consequences that might arise therefrom.

It did not have the jurisdiction to enjoin the woman from having the surgery performed, the court said. The surgery had been recommended by the woman's physician, and it was not of the kind that would be illegal to perform. The woman was of age and was not under any legal disability. The questions of the necessity of the surgery, the reasonableness of the cost thereof, and all other elements of damages connected therewith can be resolved in the damage suit brought by the woman.

Martin v. Noble, 53 Cal. Rptr. 106 (Cal., Aug. 19, 1966).

Back Injury Established as Legal Cause of Conversion Hysteria—The Industrial Commission acted improperly in refusing to reopen the claim of an employee who, after being awarded disability benefits for back injuries, developed a conversion hysteria, an Arizona intermediate appellate court ruled.

The commission's reason for its refusal was that the back injury was not the legal cause of the conversion hysteria. Its finding was based on the testimony of a neuropsychiatrist that, although there was a reciprocal cause and effect relationship between the pain of the injuries and the conversion hysteria, the accidental injury was not the medical cause of the conversion hysteria. In basing its finding on that testimony, the commission ignored the distinction between medical causation and legal causation, the court said. Legal causation does not require that the injury was the producing cause of the disability, but merely that it was a proximate cause thereof. That the accidental injury was a proximate cause of the conversion hysteria was established by the testimony of two other neuropsychiatrists that it was the "trigger" without which the conversion hysteria would not have developed.

Selvidge v. American Airlines, Inc., 417 P.2d 738 (Ariz., Sept. 1, 1966).

Regulation on Evidentiary Effect, in License Revocation Proceeding, of Blood-Alcohol Test Upheld—The revocation of a driver's license, on the ground that he had driven in such a way as to show a flagrant disregard for the safety of persons and property, was proper, even though he had been acquitted of traffic charges arising out of the same incidents on which the revocation was based, the Court of Appeals for the District of Columbia ruled.

One hour after the driver was arrested on charges of driving while intoxicated and of leaving the scene of an accident, a sample was taken of his urine. An analysis of the sample showed a blood-alcohol concentration of 0.25%.

The test result was admitted in the license revocation proceeding. No expert testimony interpreting the result was presented. The commissioners of the District of Columbia have promulgated a regulation, applicable to license revocation proceedings, which provides that proof that a driver's urine had an alcohol content of 0.20 at the time of operating a motor vehicle constitutes *prima facie* proof that he was under the influence of intoxicating liquor at that time. The regulation was a "usual and reasonable" regulation concerning the revocation of drivers' licenses, and the commissioners did not exceed the powers delegated to them by Congress in adopting it.

The sample was taken soon enough after the time that the driver was actually driving to provide an accurate indication of the amount of alcohol in his system at the time he was driving, the court said. In any event, any delay in the taking of the sample was to the driver's advantage.

Bungardeanu v. England, 219 A.2d 104 (D. of C., April 28, 1966).

Cause of Action Exists For Prenatal Injuries Due to Failure to Administer Gamma Globulin to Mother—A trial court erred in dismissing, on the ground that no cause of action existed for prenatal injuries, a suit for damages against a physician for prenatal injuries caused by alleged negligence in failing to prescribe gamma globulin for the child's mother, even though he knew she had been exposed to German measles during her pregnancy, the Rhode Island Supreme Court ruled.

For many years, the generally accepted rule was that a child had no cause of action for injuries sustained prior to birth. However, almost every court that has passed on the issue since 1946 has held that a cause of action does exist for prenatal injuries. In order that the law of the state might be in accord with that generally prevalent elsewhere, *Gorman v. Budlong*, 49 A. 704, was overruled to the extent that it stood for the principle that there could be no recovery for prenatal injuries. The right to sue would not depend on the child's viability at the time of the injury. It rejected the viability concept, not for the biological reason that a fetus is a living human being from the moment of conception, but because of its belief that a child had a legal right to begin life with a sound mind and body, the court said. The existence of a cause of action would depend on whether there was a causal connection between the child's injuries and the wrongful act of another.

Since the child involved in this case was alive, it was not necessary to pass on the question of whether a child must be born alive in order to maintain an action for injuries sustained while en ventre sa mere. It was holding only that a child who was born alive had a right of action against a negligent wrongdoer for prenatal injuries, the court said.

Sylvia v. Gobeille, 220 A.2d 222 (R.I., June 17, 1966).

Physicians Liable for Patient's Brain Damage and Paralysis During Childbirth—In a suit against an obstetrician and an anesthesiologist by a patient who suffered severe and permanent brain damage and permanent paralysis during childbirth, a jury in Massachusetts awarded the patient damages of $400,000. The brain damage and paralysis were due to the aspiration by the patient, who was under general inhalation anesthesia, of vomitus into her windpipe and lungs.

As to the obstetrician, the issue was whether he was negligent, in view of his knowledge that general anesthesia was to be used, with respect to obtaining a complete history as to the time and amount of the patient's last ingestion of food, and transmitting that history to the anesthesiologist. The issue as to the anesthesiologist was whether he reasonably took the steps required by accepted medical practice to restore oxygen to the patient's brain and lungs when faced with the emergency created by the aspiration.

There was evidence that the obstetrician and the anesthesiologist had admitted fault. They denied having done so. The obstetrician acknowledged that he had made several alterations in the hospital records. He stated that his purpose in making the changes was to correct the records. However, the effect of the changes was to lengthen the recorded time between the patient's last full meal and the onset of labor.

(*Katz v. Albert*, Mass., Oct. 28, 1966. Reference: Max S. Ficksman, 160 State Street, Boston, Mass. 02109).

Res Ipsa Loquitur Not Applicable to Suit for Anaphylactic Reaction to Penicillin—In a suit for damages against a physician by a patient who suffered an anaphylactic reaction to a penicillin injection, a trial court did not err in refusing to instruct the jury on the doctrine of conditional res ipsa loquitur, a California intermediate appellate court ruled.

The patient consulted the physician about a cut on her finger. After the patient told him that she had previously had penicillin without any reaction, the physician injected the penicillin to prevent tetanus and local infection of the finger. Five minutes later, the patient became very pale and showed signs of acute distress. The physician diagnosed her condition as severe anaphylactic reaction and began to administer the standard emergency treatment of adrenalin, Cortisone and antihistamines.

The physician testified that he knew that an anaphylactic reaction was a known risk of an injection of penicillin. A medical expert for the patient testified that the fact that a patient had previously had penicillin without a reaction does not mean that he would not have a reaction when he is later given penicillin, and that there was no reliable test to determine if a patient will have an anaphylactic reaction to penicillin.

The patient contended that the jury should have been instructed on the doctrine of res ipsa loquitur. The doctrine applies where the accident is of such a nature that it can be said, on the basis of past experience, that it was probably the result of somebody's negligence, and that the physician was probably the one who was negligent. Either common knowledge or expert testimony can be made use of in determining whether such probabilities exist.

In this case, the existence of the probabilities cannot be established on the basis of common knowledge. There are cases in which it was said that it was a matter of common knowledge among laymen that injections do not ordinarily cause trouble unless unskillfully done or there is something wrong with the substance injected. The cases in which that statement was made involved injections which caused infection, tearing of tissue, nerve injury, wrist drop, or other similar results, while the reaction which the patient had in this case was caused by the substance injected. The prior cases referred to were, therefore, not controlling here.

The reaction suffered by the patient was a rare occurrence. However, the mere fact that the reaction was a rare occurrence was not sufficient to estab-

lish that it was probably caused by the physician's negligence. It was necessary to present evidence showing that the patient's reaction was more probably than not caused by the physician's negligence. There was absolutely no evidence that any negligence on the physician's part was involved in the patient's anaphylactic reaction.

Campos v. Weeks, 53 Cal. Rptr. 915 (Cal., Oct. 18, 1966).

Jury Question Raised in Suit Against Physician for Failure to Detect Foreign Body's Presence—In a suit for damages against a physician by a patient for injuries caused by his alleged negligence in failing to discover the presence of and to remove steel suture material left in her abdomen following a hysterectomy, a trial court erred in directing a verdict in favor of the physician. The evidence raised a jury question as to the negligence of the physician in administering postoperative treatment, the Arizona Supreme Court ruled.

The patient saw the physician at least once a week for eight months after the hysterectomy. Despite her complaints throughout that period of "sticking pains" in the incision of her abdomen, the physician did not, on any occasion, examine her by inspection and palpation or give her an x-ray examination. He merely gave her some pills and told her that the pains would go away if she put on some weight. The patient's husband testified that he had examined her abdomen several times during that period and had felt some foreign substance in the incision. There was also evidence that the physician's associate had seen her on one occasion during that period and had, after hearing her complaints, opened the incision and removed one steel suture.

The patient then consulted several other physicians, the last of whom found, as the result of examining her by palpation and inspection, some nodules beneath the hysterectomy scar. He ordered an x-ray examination which disclosed that the nodules were opaque material. He performed an operation in which he removed the lumps which were found to be steel suture material. The patient no longer suffers any pain or discomfort because of her incision.

The physician contended that the verdict was properly directed in his favor, because the patient did not establish by affirmative evidence any community standard of care to which he was required to conform, or present expert medical testimony showing that his postoperative treatment was not in accordance with the established standard for cases such as hers.

The general rule is that negligence on a physician's part must be established by expert medical testimony. However, expert testimony is not required where the physician's negligence is so grossly apparent that a layman would have no difficulty in recognizing it. The evidence presented by the patient showed that the physician made little or no effort to discover the cause of her pain and to relieve it. The evidence also showed that, if the physician had made an examination of the patient, he would have discovered the cause of her pain. Expert testimony was not necessary to establish that the physician did not exercise due care if he acted without giving the patient as thorough and careful an examination as her condition and the attending circumstances permitted, the court said.

A physician owes a patient the same duty of skill and care in his postoperative treatment as in the performance of the operation, unless the terms of his employment otherwise limit his services or the patient refuses them. A layman could say that a physician, who failed to make any examination of a patient who continually complained of pain over a substantial period of time, was negligent. Such negligence amounts to malpractice, unless evidence is presented which tends to excuse the omission. This was particularly true in this case, where there was evidence that another physician found, by examining the patient by palpation and inspection, the cause of her pain and remedied the situation.

Revels v. Pohle, 418 P.2d 364 (Ariz., Sept. 28, 1966).

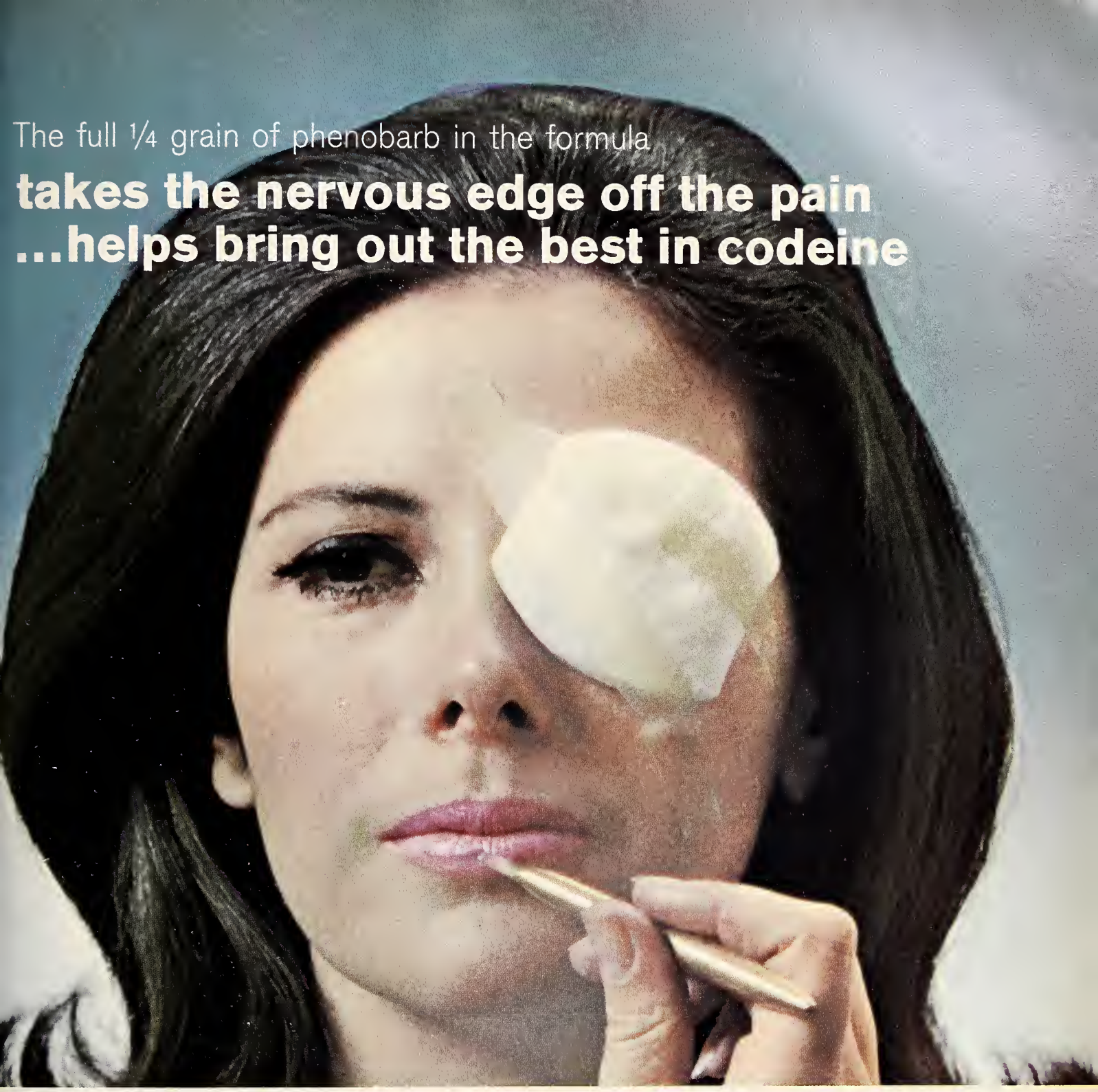
Damages of $275,000 Awarded for Sciatic Nerve Injury Caused by Injection—In a suit against a city by a patient who developed leg injuries after being given an injection of penicillin at the emergency room of a city hospital, the patient was awarded damages of $275,000 by a New York trial court jury.

The patient was taken to the hospital because she had a mild fever and sore throat, and was vomiting. While the patient was being held in her mother's arms, a nurse gave her an injection in the left buttock. The next morning the patient was unable to use her left leg. Three operations to correct the patient's limp have been unsuccessful.

It was contended that the injection had been improperly given and had permanently injured the sciatic nerve. It was also contended that it was contrary to accepted standards of medical practice to give an injection while a patient was in a position such as the patient was in while being held in her mother's arms. (News Release, New York, N.Y., Oct. 26, 1966).

Physician not Liable for Amputation of Patient's Toes Following Injection of Levophed—In a suit for damages against a physician by a patient for the loss of the great toe and half of the second toes of his right foot, a verdict in favor of the physician was returned by an Illinois trial court jury. The physician placed the patient on intravenous Levophed as treatment for acute peritonitis. Four days later, gangrene developed at the injection site, which subsequently made the amputation of the toes necessary.

Joyce v. Petrone, Cir. Ct., Cook Co., Docket No. 61 C 2623 (Ill., Nov. 16, 1966). ◄



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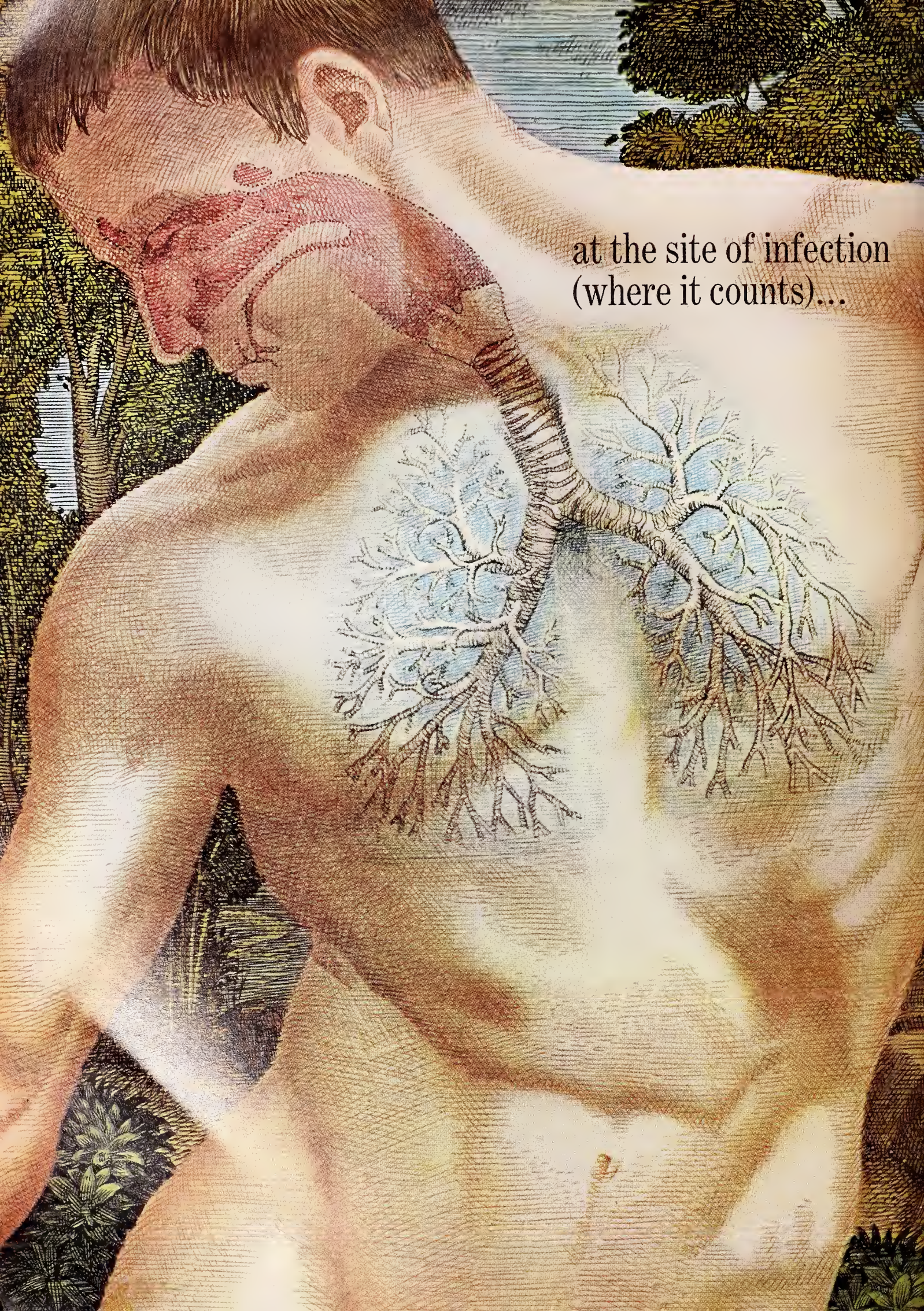
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Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

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(See next page for prescribing information.)

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Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base) in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

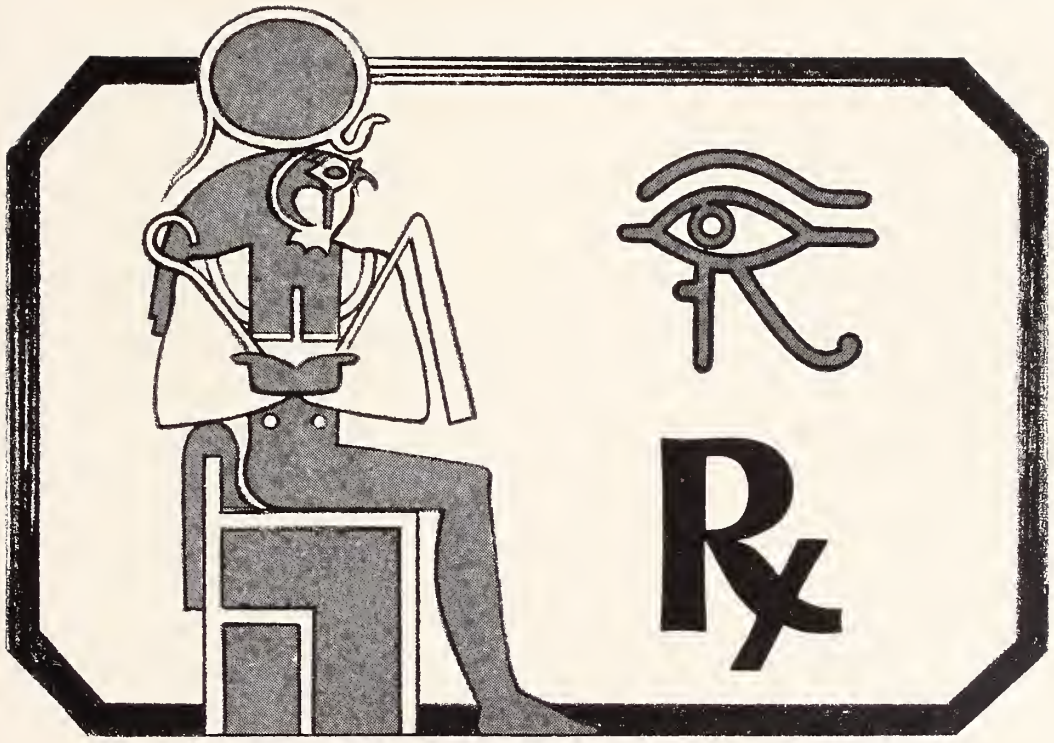
Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964.
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962.
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
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How Blue Shield Prepayment Started

(One of a series prepared by Blue Shield)

Health care takes five and one-half cents of every dollar Americans spend today. Back in 1929 it took only four cents.

If you consider after-tax dollars, however, you will find that Americans are spending about the same proportion of their net income for health care today as they did in 1929.

But even more important is the fact that most Americans do not pay directly for most of the health services they receive. Instead, they have paid indirectly for their medical care through Blue Shield Plans, other prepayment programs, and private health insurance plans.

In the early 1900's insurance contracts offering limited cash benefits for disabilities due to sickness or injury were only available to those persons who were in excellent health and who could afford to pay the premiums.

Naturally these were the very people who needed such protection the least and were also the best able to pay for it.

Practicing physicians saw these inequities. They became concerned about how their less fortunate patients could pay for health care.

This concern was apparent as early as 1919 when an American Medical Association committee reported that health insurance, in order to be successful, should be locally administered and based on a type of mutual fund set up by employers and employees.

The actual starting point of the medical profession's unique relationship with prepayment began in 1934 when the AMA's House of Delegates adopted a set of recommended standards for the organization and operation of medical prepayment plans. Among the first Blue Shield plans were those in California, Michigan, Massachusetts, New Jersey, New York, North Carolina, West Virginia, Colorado and Texas.

As the Blue Shield concept grew, it became obvious that a central coordinating agency was needed, and the American Medical Association established what is now known as the National Association of Blue Shield Plans in 1946.

The number of Plans in the new organization increased over the years until today's membership includes 84 Plans with a total enrollment of more than 58 million in the United States, Puerto Rico, and Canada. The NABSP has expanded its role from that of a simple coordinating and approval agency to one providing a wide range of services for its member Plans.

The physician, however, has always played a key role in the promotion and administration of Blue Shield. This role ranges from being participating physicians to serving as directors and trustees of Blue Shield Plans. ◄

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Communications Division

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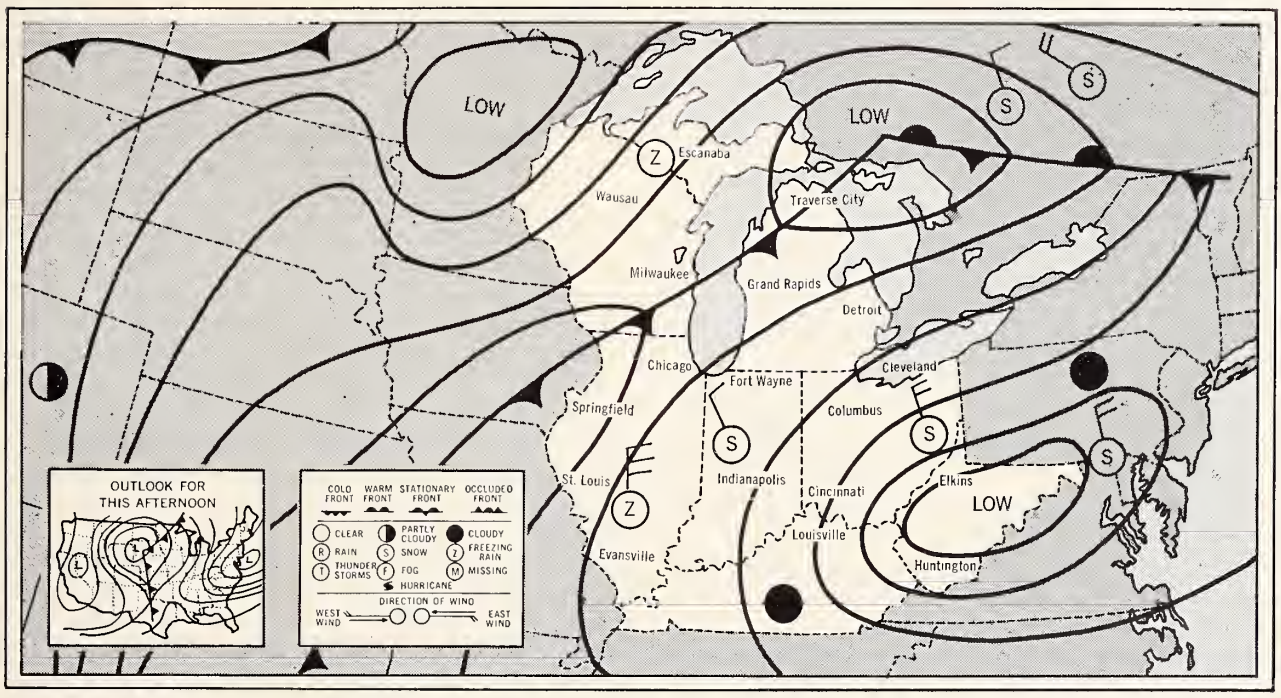
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Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. *Side effects:* Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. *Precautions:* The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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ABSTRACTS

BOOK REVIEWS

PRINCIPLES OF INTERNAL MEDICINE

T. R. Harrison and 136 collaborators; fifth edition; McGraw-Hill Book Co., New York; 1874 pages; illustrated; 1966; $22.50.

This textbook has been attaining steadily increasing popularity and is now a most formidable competitor to the other contemporary publications in this exacting field. Much of its worth stems from the unique arrangement of its subject matter. The first two entire sections deal with a discussion of the doctor vis-a-vis the patient and with the "Cardinal Manifestations of Disease." The third section is devoted to "Biological Considerations" pertaining to the normal and the pathological. Only after such an "introductory" first fifth of the book does the reader have the opportunity of studying specific diseases as such.

The entire textbook has been extensively revised; these first three parts in particular have been brought completely up to the most recent possible. By themselves, they justify possession of the entire volume. It is within the comprehension of the beginning student; the practitioner of many decades will be well advised to browse through its compact pages every six months or so.

Of necessity, each disease entity is presented most compactly; editorial blue pencilling produces brevity; it also inhibits the smooth and rounded English of such master writers as Osler.

A carping critic might raise his brow at the omission of tests for the isoenzymes of LDH, particularly when liver function is discussed. This test has been widely accepted and many hospitals now report on all five varieties of this substance. Also, on p. 679, trench fever is given its other names including "Wolhynian." This particular name is derived from the name of a Ukrainian province; usually, the first letter is spelled with a *V* rather than a *W*.

Typographical errors are few and insignificant. The format is good as is the type. Despite increase in size, the publisher has come up with very adequate, lighter paper so that this fifth edition actually weighs two pounds less than its predecessor! All in all: a book destined for leadership.

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

YEAR BOOK OF NUCLEAR MEDICINE

Edited by James L. Quinn, III; Association of America Year Book Publishers, 384 pages; 105 illustrations; Volume I, 1966; $10.00.

Fission continues its inexorable way; this volume, number I, marks official recognition of nuclear medicine having attained stature as a recognized sub-specialty. As an internist with some interest in this field, I am delighted (and somewhat sheepishly chagrined) at reading so much that I did not know existed!

The opening chapter by Dr. Harper on Radionucleide Dosimetry does not have to have (or does it?) the strictures anent the common misconceptions as to the basic nature of radiation dosage and to the differences between radiation and exposure dosages. However, the lengthy discussion on the thyroid was very interesting. It was a pleasure to find (p. 95) the flat statement that, "radioiodine has become standard treatment but . . . the undesirable side effect (myxedema) will force a decline of radioiodine."

The "old" Kety method of measuring cerebral circulation clearances has been enormously refined by the use of ^{85}Kr. Also, regional cerebral clearance rates in man have been sharpened by using ^{133}Xe inhalation and extracranial recording. Dual lung-scanning technics offer new concepts for precise evaluation of pulmonary function. In discussing intestinal absorption of ^{45}Ca in stone-forming patients, the thought is advanced that we are dealing with a metabolic abnormality: increased intestinal absorption of calcium.

The use of Technetium-99 as a scanning agent is fascinating. Technetium is a transuranium element created in the laboratory long after World War II. An excellent argument for the formation of this latest subspecialty!

The format is good; typographical errors are minimal; editorial pruning has been thoughtful; price is within the usual. The first in this series is a must for the expert radiologist and pathologist; it is recommended reading for the internist. Certainly, it belongs on the shelves of hospital libraries.

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

ATLAS OF HERNIA REPAIR

Carl H. Calman, M.D., C. V. Mosby Co., St. Louis, Mo., 1966; 159 pp. including index and bibliography; $16.75.

An atlas, as usually understood in medical circles, especially in relation to surgical anatomy and operative technic, is defined as "a collection of plates illustrating any subject." Such plates, to be useful, should be not only accurate but also large and clear. There are many good illustrations in this atlas, but this reviewer feels that there are too many which are much too small, and consequently unclear. Many drawings slightly over one inch in diameter represent areas four times that large. In one instance (p. 35) one of the drawings appears to be upside down. These small drawings are not objectionable in simple diagrams illustrating a single point, or lesson, such as the series delineating congenital anomalies presenting at the umbilicus (pp. 80-81), but illustrations of surgical technic should certainly not be cramped.

The text is laconic, as expected in an atlas, but very well done



Hanger Prosthetic Appliances have brightened the present and the future for many amputees. For example, Weaver Nolt says: "My son, Lloyd, was a pathetic figure in a big hospital bed after his legs were amputated because of an accident. Today it's a big and wonderful world again as he gets along so wonderfully on his Hanger legs. He walks without any help, and runs and pushes his wagon all over the farm. That other day is just a hazy memory, and we are so pleased things are so different than we expected.

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with just sufficient historical background to whet one's appetite for more, and to explain the numerous eponyms in this field of surgery. The subject of hernia repair seems to be well covered, the index adequate, and the bibliography ample (over 110 titles). A valuable feature of this work is the straightforward approach, with definite recommendations as to technic; yet the author consistently calls attention to variations in technic according to conditions found in any particular patient, or, in many instances, agreeable to the preference of the surgeon. To quote his preface: "In this text I have sought to remedy the defects in attention to hernia and the problems that surround the adequate repair of hernias. I hope to avoid the notion that any hernia should be repaired by a particular method and to promote the view that the surgeon should have at his disposal a thorough knowledge of regional anatomy, appreciation of the physiological result desired, and the intelligence and judgment, in each case, to utilize most advantageously the tissues available."

A. W. CAVINS, M.D.
Terre Haute

FROM AUSCULTATION TO PHONOCARDIOGRAPHY

Aldo A. Luisada, M.D., The C. V. Mosby Co., St. Louis, 1965; 351 pages, 196 illustrations.

This very thorough presentation by Dr. Luisada, a long-time investigator in this field, has much merit and material. It is primarily directed to the internist and the cardiologist. It reaches its high point of interest in Part IV where clinical phonocardiography is discussed. There one can find a very excellent presentation of helpful clinical, bedside auscultatory data.

It is doubtful whether many readers, except those involved in this type of research, will read Part III which embodies "Technical Aspects of Phonocardiography." The clinician, who is searching for knowledge to make him a better student of his art, will find this unhelpful and uninteresting. This does not detract at all from the worth of this book. In personal conversation with the author he reported that already he and his colleagues had discovered at least nine technical errors. Thus, the sophisticated cardiologist may locate these as he carefully peruses this informative tome.

A. D. DENNISON, JR., M.D.
Indianapolis

Abstracts From Various Literature, Prepared by AMA

VILLOUS ADENOMA OF RECTOSIGMOID WITH WATER AND ELECTROLYTE LOSS: REPORT OF TWO CASES

E. Streicher (Medizinische Klinik des Katharinenhospitals, Kriegsbergstr. 60, Stuttgart, Germany)

Deutsch Med. Wschr 91:1821-1824, (Oct. 14), 1966.

Two patients with villous rectal adenoma which had led to severe dehydration and loss of electrolytes are reported. In one of them there was acute renal failure with uremia, which responded to hemodialysis. Complete cure was achieved in both patients by resection of the tumor.

PERITONEAL DIALYSIS FOR SEVERE SALICYCLISM: EVALUATION OF INDICATIONS AND RESULTS

R. J. Schlegel et al. (L. B. Altstatt, 766 Irving Ave., Syracuse, N. Y.)

J. Pediat. 69:553-562, (Oct.), 1966.

Since peritoneal dialysis for salicylate intoxication carries a high



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Pectin ..... (2½ grains) 162 mg.
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iatrogenic risk, the indications for treatment in 82 consecutive admissions for salicylate poisoning were evaluated. Detailed observations are presented on two patients from the series of 82 and on three others not in the series. Eighty patients responded to conservative treatment and recovered uneventfully. Four of the five patients treated with peritoneal dialysis demonstrated an unusually rapid clinical recovery. Use of a dialyzing solution containing 5% albumin enhanced the rate of removal of salicylate and apparently speeded clinical recovery.

EVALUATION OF THE EFFECTS OF TERMINATING THE DIET IN PHENYLKETONURIA

G. Solomons (Child Development Clinic, University of Iowa, Iowa City), L. Keleske, and E. Opitz.

J. Pediat. 69:596-602, (Oct.), 1966.

Seven children with phenylketonuria were evaluated before and after the termination of diet therapy. The mean duration of the diet therapy was three years, four months, and the mean length of time after cessation of the diet was seven and one-half months. The results of termination of the diet suggest that after the age of six years, cessation is safe and appears to produce improvement in behavior, school performance, and in the emotional climate of the family. In a small number of instances, the unfavorable emotional climate produced in a family by an attempt at rigid imposition of a difficult diet may negate the beneficial results expected from such therapy.

MODERN CONCEPTS IN CANCER OF THE COLON AND RECTUM

W. H. Cole, S. S. Roberts, and F. W. Strehl (University of Illinois College of Medicine, Chicago)

Cancer 19:1347-1358, (Oct.), 1966.

Measures to control both local recurrence and distant vascular spread have been analyzed in depth under eight major categories. The control of vascular spread is advocated by early distant ligation of the vascular trunks and in right hemicolectomy by starting the dissection in the gastrocolic area rather than to the right of the ascending colon; the latter should minimize the possibility of dissemination of cancer cells into the systemic circulation. Local spread can be minimized by isolating the tumor segment from the wound and abdomen. Essentials of this technic, which should be a standard part of colon surgery, include isolation of the malignant tumor segment, wide excision of the mesentery, irrigation of each lumen of the bowel with distilled water or half strength Dakin's solution, and excision of each end of the bowel crushed by the crushing clamps before beginning the anastomosis. Current concepts of the role of cancer detection, polypoid lesions, and other factors influencing prognosis also were reviewed.

REOPERATION FOR BRONCHOGENIC CARCINOMA

W. B. Neptune (Overholt Thoracic Clinic, Boston), F. M. Woods, and R. H. Overholt

J. Thor. Cardiov. Surg. 52:342-350, (Sept.), 1966.

Fifteen patients had a second pulmonary resection for bronchogenic carcinoma. All originally had had a favorable operation and good pulmonary reserve. The new or recurrent tumor was discovered early, and the second operation was done for what appeared to be localized disease. Four patients were initially discovered by survey roentgen examination and were free of symptoms. One patient had a resection for bronchiectasis and had carcinoma in situ in the surgical specimen. In eight patients who were still free of symptoms, the second operation was done for a new lesion discovered at follow-up examination. Two patients were initially found to have bilateral primary tumors which were subsequently resected by staged procedures. There was one postoperative death. Five patients subsequently died. There are nine patients still alive and well without evidence of tumor. Frequent roentgen examination offers the best chance for early detection of either recurrence or a new tumor. ◄

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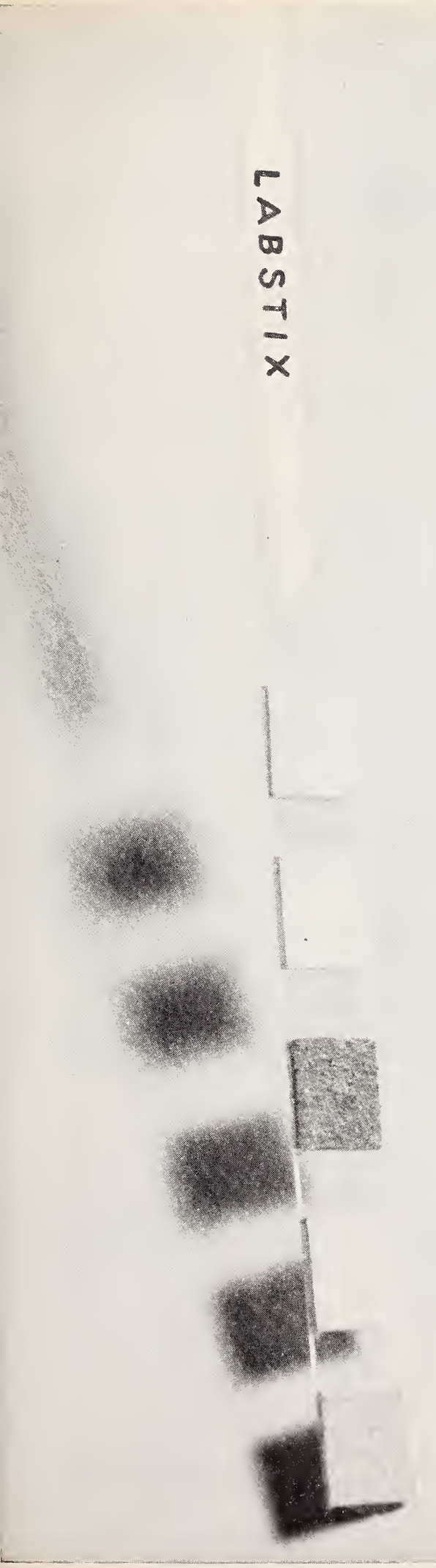
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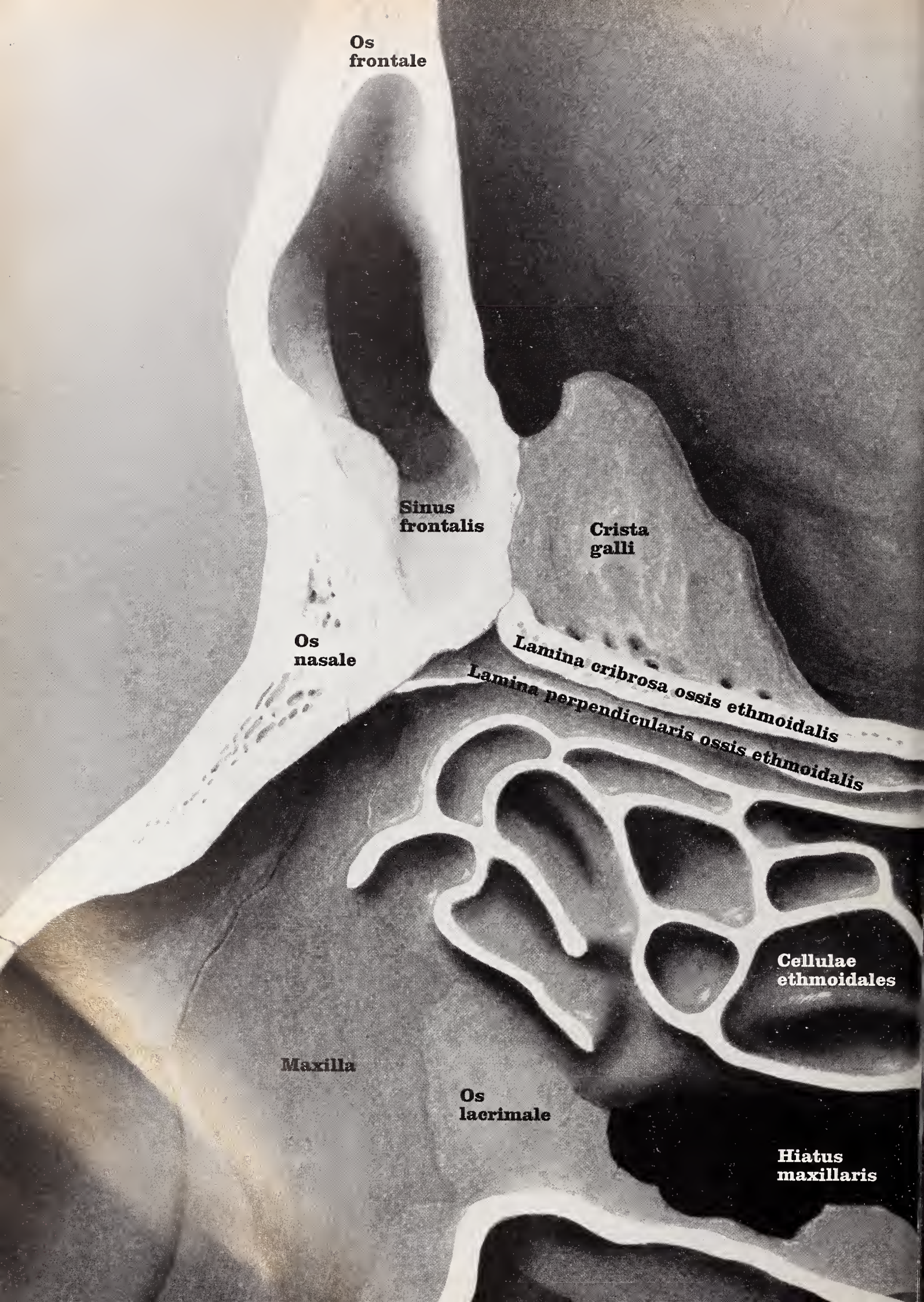
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Sinus headache is not a single entity, but a chain reaction of pain. It is facial pain—deep, dull, aching and nonpulsating. It is referred pain—originating in the nose and sinuses but felt at another site. It may become generalized pain and tension in head and neck. It is one or all of these.

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Side Effects: Epigastric distress, drowsiness, dizziness, insomnia and nervousness.

Precautions: Instruct patients not to drive or operate machinery if drowsiness occurs. Use with caution in patients with thyroid disease, heart disease, hypertension, diabetes or kidney disease. Excessive dosage or prolonged use may cause kidney damage.

Dosage: Adults—2 tablets every 4 hours.

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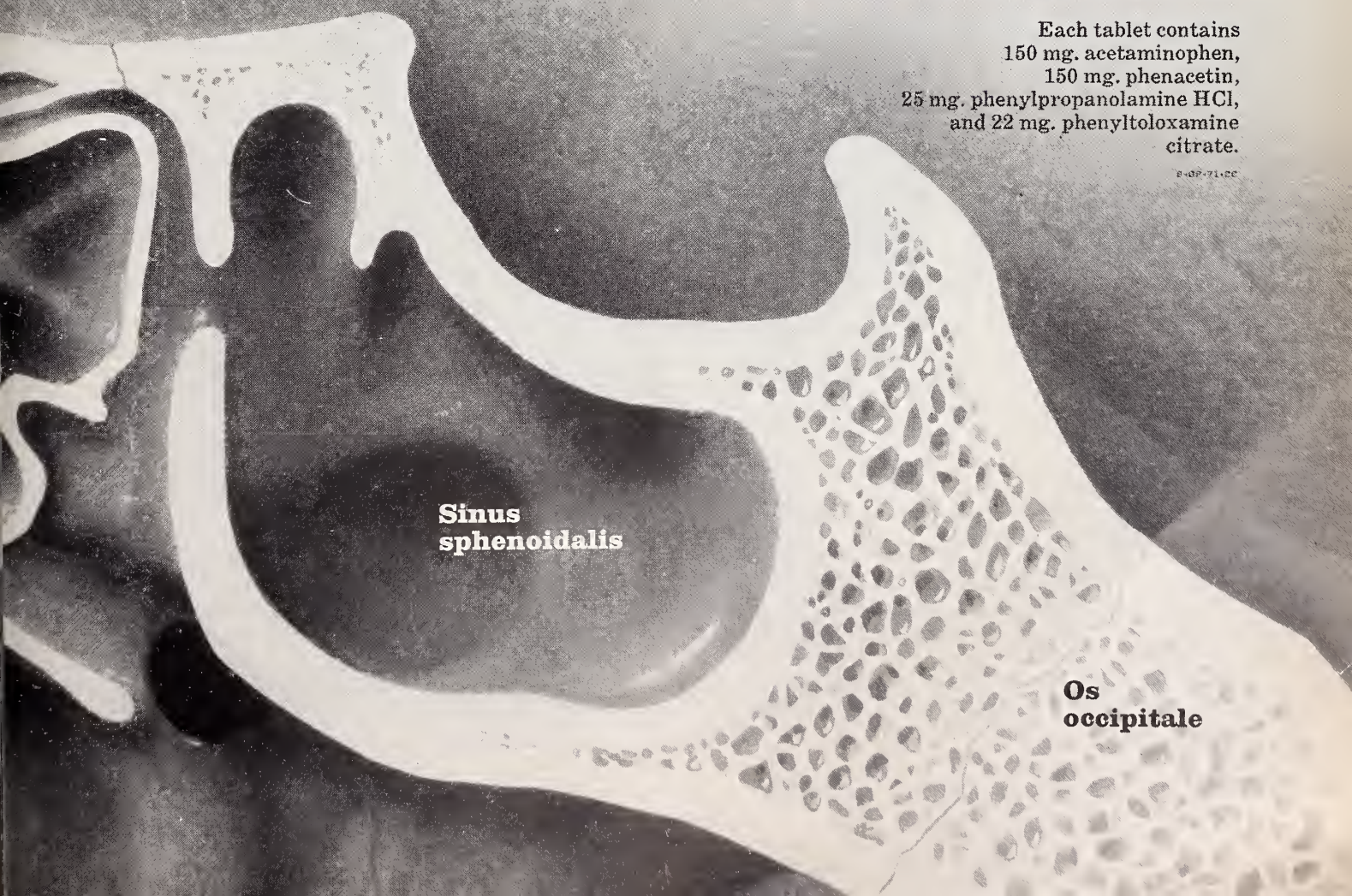
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DOCTORS HICKMAN AND COBLE ELECTED TO THE JOURNAL EDITORIAL BOARD

Drs. Jack W. Hickman, Indianapolis and Frank H. Coble, Richmond, have been elected to the Editorial Board of *The Journal* for three-year terms.



Dr. Hickman



Dr. Coble

Dr. Hickman, a regular contributor to *The Journal* with his "Gleaned from the British Medical Journal" series, is Director of Medical Education, Marion County General Hospital and Assistant Professor of Medicine at the Indiana University School of Medicine.

Dr. Coble is an ophthalmologist and member of the Flying Physicians Association.

Dr. W. D. Snively, Jr. Speaker for April History of Medicine Society

Dr. W. D. Snively, Jr., Vice-President for Medical Affairs, Mead Johnson & Company, Evansville, will speak on "Satan's Ferryman" at the April 13 meeting of the John Shaw Billings History of Medicine Society.

The group meets at the I.U. Student Union Building, Indianapolis. The social hour begins at 6:00 p.m., dinner is set for 6:45 p.m. and the speaker at 8 p.m.

PMA Establishing Scholarships In Clinical Pharmacology

The Pharmaceutical Manufacturers Association Foundation is establishing 20 scholarships in clinical pharmacology to provide medical students with the opportunity to acquaint themselves with basic scientific knowledge and technics in the field.

The stipend will be $1,000 for a three-month period or the equivalent of a three-month period, allowing a student to intermittently space his assignment where necessary. Medical schools will nominate scholars for the award.

The program supplements the Foundation's faculty development awards which were announced in October, 1966, and which provide salary support for full-time junior faculty positions in clinical pharmacology. Both programs are part of the Foundation's program "to promote the public health through the study and development of the science of therapeutics."

Dr. Montgomery New President

Dr. Lall G. Montgomery, Muncie, has been installed as president of the American Society of Clinical Pathologists.

Dr. Christopherson Elected To Medic Alert Foundation

E. H. Christopherson, M.D., Executive Director of the American Academy of Pediatrics, Chicago (Evanston) Illinois, has been elected to the Board of Directors of the Medic Alert Foundation International, Turlock, California.

Medic Alert is an international, nonprofit organization dedicated to educating and indoctrinating the medical profession and the public to the need for individuals with special or "hidden" health problems wearing a Medic Alert emblem on their person describing the condition.

Each emblem carries the words "Medic Alert" and the staff of Aesculapius emblazoned in red enamel. The reverse side of the emblem contains one or more key words describing the individual's medical problem, the Foundation's telephone number and wearer's identifying number corresponding to an information card in the Medic Alert files. The Foundation maintains a 24-hour-a-day Central Answering Service to provide additional information on registrants in case of emergency, for physicians, public safety officials and emergency hospital rooms. It is estimated that forty million Americans should wear some form of instantly recognizable informational device about their condition. The need is amplified by a highly mobile population.

Dr. Silver Made Fellow

Dr. Richard A. Silver, Indianapolis, was recently made a Fellow of the American College of Radiology at its annual meeting in Los Angeles.

State Board will Conduct Examinations on June 13, 14 and 15

The State Board of Medical Registration and Examination will conduct an examination on June 13, 14 and 15.

Applications, with all required data from foreign medical graduates, will be accepted in the office of the Board in Room 1021, State Office Bldg., for evaluation and consideration any time after January 1 and prior to April 1.

Applications, with all required data from American medical graduates, will be accepted in the Board office, for evaluation and consideration any time after April 1 and prior to May 15.

Dr. Leslie W. Freeman Named First Betsey A. Barton Professor

The appointment of Dr. Leslie W. Freeman as the first Betsey A. Barton Professor at the Indiana University School of Medicine in Indianapolis was announced recently.



Dr. Freeman

The newly created memorial chair has been made possible through the establishment of the Betsey A. Barton Fund for Neurological Research in the Indiana University Foundation.

Miss Barton, who died in 1962, was the daughter of Bruce Barton of New York City, retired author and advertising man, and the sister of Randall Barton, newspaper executive, of Phoenix, Ariz.

In commenting on the appropriate nature of the memorial fund, Dr. Glenn W. Irwin Jr., dean of the I.U. School of Medicine, said:

"During much of her lifetime, Miss Barton had a deep interest in neurological research and was an effective voice and courageous example for disabled people. She particularly wished to further the search for alleviation of the many problems of paraplegic patients through her personal support of the work being done at the I.U. Medical Center, but her plans were cut short by her untimely death. Through the creation of the Betsey A. Barton Fund, her family and friends are now carrying out her wishes."

American Fracture Association Meets in La Guaira, Venezuela

The American Fracture Association met recently at the beautiful Macuto-Sheraton Hotel in La Guaira, Venezuela under the capable chairmanship of Dr. Luis Irigoyen Dotti.

Dr. Irvin Scott of Sullivan, Indiana was the American chairman and Dr. Compere Basom, El Paso, Texas presided as president of the organization. Papers were given in Spanish and English with simultaneous translation. Members from the United States, Venezuela, Colombia, Panama, Equador and Mexico presented papers dealing with many phases of fracture diagnosis and treatment. The visiting North Americans were impressed with the high level of fracture treatment being carried out by Latin American orthopaedic surgeons.

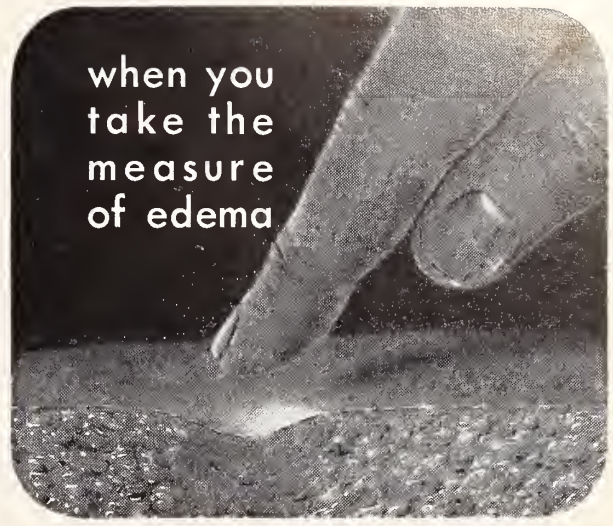
A meeting of the American Fracture Association Board of Governors was held with the Planning Committee of the Latin American Orthopaedic Association at which time the American Fracture Association was formally invited to participate as an organization in the forthcoming meeting of the Latin American group to be held in the Macuto-Sheraton in January, 1968.

Drs. Leo Cooper, Gary; C. Philip Fox, Washington; Virgil McCarty, Princeton and Dr. Scott are the Hoosier representatives on the board of governors of the association. Dr. Scott is also past president.

Dr. Richard Westerman Wins 1966 AAGP Ross Award

The 1966 Ross Award of the American Academy of General Practice has been won by Dr. Richard L. Westerman of Evansville, Ind., staff member at Evansville's Deaconess Hospital and associate medical director of Mead Johnson & Co.

The award, made possible by a grant from Ross Laboratories, is presented by the Academy for the best scientific article by a member to be published in its medical magazine, *GP*, during the year. Dr. Westerman's article "Potassium Deficit: Clinical Aspects," appeared in *GP* in June. He co-authored the article with Dr. W. D.



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DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

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Snively, Mead Johnson International vice-president, who is a previous Ross Award winner.

The presentation to Dr. Westerman was made at the Academy's Annual Scientific Assembly in Boston. Dr. Reginald F. DeWitt, chairman of the AAGP Awards Committee, presented a plaque and $1,000 check to the Evansville medical author.

The award-winning article pointed out that deficit of potassium is far more prevalent than is commonly recognized and that such deficit can be caused by excessive loss, increased use or decreased intake of potassium. It explored in depth the specific causes and effects of potassium deficit and cited appropriate measures for its prevention and correction.

New Film Program Launched By the American Cancer Society

The American Cancer Society, according to James H. Gosman, M.D., chairman of the physician's subcommittee of the Medical and Scientific Committee of the Indiana Division, has embarked on a new film program for professional audiences.

The new professional films, which are 16mm, are now available from the American Cancer Society in Indiana either through the local county units or direct from the Division office, 445 N. Pennsylvania St., Indianapolis.

Five of the films are available now and include "Cancer In Children," "Diagnosis And Management of Cancer of the Colon and Rectum," "Oral Cancer," "Diagnosis and Management of the Patient With Cancer" and "The Dentist and Cancer." The balance of the films will be released later in 1967 and 1968. The films are for professional use only and have been produced with technical advise from the nation's leading medical authorities.

S. S. HOPE Sails on Ten-Month Mission to Colombia, S. America

The hospital ship S.S. HOPE sailed from Philadelphia on February 7 on a ten-month mission to Colombia. Enroute the ship stopped in Miami for two days to participate in the dedication of a new seaport there.

It will be anchored in the port of Cartagena for its medical teaching and treatment mission. While there the permanent medical staff aboard will be augmented by volunteer physicians and dentists who will serve on a rotating basis for two months each.

Relation of Immunology and Drug Evaluation Studied by Scientists

The relation of immunology and drug evaluation was studied by 70 scientists early in March at a symposium jointly sponsored by the Pharmaceutical Manufacturers Association Foundation, the National Academy of Sciences and the National Institutes of Health.

The group discussed current immunologic concepts, mechanisms of drug binding and localization, immune mechanisms as a cause of reactions to drugs and technics of assay by immunologic procedures. Several symposia are planned for the future on the subject of drug research.

Postgraduate Course at Marion County General Hospital Cancelled

The March 29 postgraduate course on "Outpatient Chest Diseases" has been cancelled by the Marion County General Hospital.

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Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

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Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964. — 76.9% of 407 patients

Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966. — 84.6% of 39 patients

FUTURE MEETINGS, SEMINARS, COURSES

Postgraduate Course at Marion County General Hospital Cancelled

The March 29 postgraduate course on "Outpatient Chest Diseases" has been cancelled by the Marion County General Hospital.

ISMA Members Invited to 1967 Cancer Society Scientific Session

Members of the ISMA are invited to attend the 1967 Scientific Session of the American Cancer Society on May 3 at the Sheraton-Dallas Hotel, Dallas, Texas.

Current concepts in etiology and diagnosis of cancer will be covered from the practical standpoint. Copies of the program and more information may be obtained by writing Vice-President for Professional Education, American Cancer Society, 219 E. 42nd St., New York City 10017.

Denver Children's Hospital Sets Annual Spring Clinics

Children's Hospital, Denver, is holding its Spring Clinics at Vail on June 26, 27, 28. Guest faculty will include Sydney Gellis, M.D., Tufts University; Mary Ellen Avery, M.D., Johns Hopkins University; Robert Kugel, M.D., University of Nebraska; James K. Weaver, M.D., University of New Mexico; William Daeschner, M.D., University of Texas; Hugh Thompson, M.D., Tucson, District Chairman of Region VIII of the Academy of Pediatrics.

There will be morning seminars and lectures, with afternoons of leisure in the Rocky Mountains. Advances in Pediatrics and The Path Ahead in Pediatric Practice will be the guidelines for the clinics.

Fee is $40.00. Write: Joseph Butterfield, M.D., Children's Hospital, Nineteenth Avenue at Downing, Denver, Colorado 80218, for further information.

First Regional Cancer Symposium Will be April 5 at Fort Wayne

The first Regional Cancer Symposium, sponsored by the Allen County Cancer Society and the Fort Wayne Medical Society, will be held April 5 at Fort Wayne.

Speakers and their topics will be Drs. Harry W. Southwick, "Management of Malignant Melanoma"; William H. Beierwaltes, "The Diagnostic Localization of Tumors with Radioisotope Labeled Compounds"; Charles A. Doan, "The Leukemias and the Lymphomata, an Optimistic Outlook" and Robert Q. Marston, "Regional Medical-Cancer Programs."

Environmental Health Management National Congress April 24-26

The National Congress on Environmental Health Management will be sponsored by the AMA in a three-day scientific meeting at the Americana Hotel in New York City on April 24 to 26.

Authorities on pollution of air, water and other resources will join with health authorities in a series of lectures and panel presentations. Further information may be obtained by writing the AMA Council on Environmental and Public Health, 535 N. Dearborn, Chicago 60610.

Ophthalmology, Otolaryngology Spring Congress to be April 3-7

ISMA members are invited to attend the fortieth Spring Congress in Ophthalmology and Otolaryngology and allied specialties to be held at the Gill Memorial Eye, Ear and Throat Hospital, Roanoke, Virginia, April 3 through the 7th.

A distinguished guest faculty will participate in the scientific program. The matriculation fee is $125.00. The class is limited in numbers. For details write The Superintendent, Gill Memorial Eye, Ear and Throat Hospital, Box 1789, Roanoke, Virginia 24008.

Cleveland Clinic Announces Four Postgraduate Courses in April

The Cleveland Clinic Educational Foundation will present four postgraduate courses next month in Cleveland. Courses on "Diagnostic Procedures in Gastroenterology" will be offered April 5 and 6 and courses on "Diabetes Mellitus: The Old and the New" will be given April 26 and 27.

For further information and detailed programs, write to: Director of Education, the Cleveland Clinic Educational Foundation, 2020 E. 93rd St., Cleveland 44106.

Fourth Midwest Anesthesiology Conference to Meet May 11-13

The Fourth Midwest Anesthesiology Conference, sponsored by the Illinois Society of Anesthesiologists, will meet in the Palmer House, Chicago, on May 11, 12 and 13.

The scientific program will deal with physiologic measurements in clinical anesthesia. For further information write Dr. Anna E. Barnstable, 301 Oak Tree Lane, Waukegan, Illinois 60085.

Annual Spring Session of the American Academy of Pediatrics

Interested members of ISMA are invited to attend the annual spring session of the American Academy of Pediatrics to be held in the San Francisco Hilton Hotel April 3 to 5.

The program will highlight child health, the newborn, neurologic disorders in children, the child from two to six, school difficulties and adolescent growth and behavior. The registration fee for members is $15, for non-members, $25. There is no fee for properly identified interns and residents. Write the Academy at 1801 Hinman Ave., Evanston, Illinois 60204.

American Rheumatism Association Annual Meeting to be June 15-16

The American Rheumatism Association will hold its annual meeting at the New York Hilton on June 15 and 16.

Full particulars may be obtained by writing Miss Margaret M. Walsh, Exec. Secy., 1212 Avenue of the Americas, New York City 10036.

Distinguished Faculty To Attend Symposium in Louisville

The University of Louisville School of Medicine, in cooperation with the Kentucky Chapter of the Arthritis Foundation, will sponsor

a one-day Symposium on Rheumatic Diseases at Louisville General Hospital's Rankin Amphitheater on Thursday, April 20.

Among the outstanding guest speakers will be Dr. Theodore A. Potter, Associate Professor of Orthopedic Surgery, Boston University School of Medicine; Dr. Nathan Abrams, Associate Clinical Professor of Medicine, University of Cincinnati College of Medicine; Dr. Glenn M. Clark, Professor of Medicine and Chairman of Division of Rheumatology, University of Tennessee, Memphis; Dr. Robert H. Freiberger, Director of Department of Radiology, Cornell University Medical College, New York; Dr. Edward E. Gordon, Chairman of Department of Physical Medicine and Rehabilitation, Michael Reese Hospital and Medical Center, Chicago; and Dr. Leon Sokoloff, Chief of Section on Rheumatic Diseases, National Institutes of Health, Bethesda, Maryland. Dr. William S. Clark, president of The Arthritis Foundation, New York will be a special guest panelist. The chairman of the program is Dr. David H. Neustadt, Chief of Section on Rheumatic Disease, University of Louisville.

The conference will cover osteoarthritis and related disorders, and is open to all doctors, therapists and other professionals concerned with the nation's number one crippler — arthritis.

Further information and registration form may be obtained through the Kentucky Chapter, Arthritis Foundation, 209 Speed Building, Louisville, Ky.

Clinical Electroencephalography Course Will Be Conducted June 5-7

A continuation course in "Clinical Electroencephalography" will be conducted on June 5-7 in Philadelphia, Pennsylvania.

This is the second course sponsored by the American EEG Society (aided by a grant from the Bureau of State Services, U.S.P.H.S.) and is designed for physicians who have had little or no formal EEG training. Inquiries about further details of the course and registration procedure should be addressed to Dr. Donald W. Klass, EEG Course Director, Mayo Clinic, Rochester, Minn.

19th Annual Joseph and Samuel Freedman Lectures in Radiology

Dr. Richard H. Marshak, professor of radiology at Mt. Sinai School of Medicine in New York City, will deliver the 19th annual Joseph and Samuel Freedman Lectures in Diagnostic Radiology April 15 and 16 at the University of Cincinnati College of Medicine.

Radiologists desiring to attend are requested to write Dr. Benjamin Felson, department of radiology, Cincinnati General Hospital, for further details.

"Clinical Problems of the Newborn" Seminar Will be Held on April 13

The fifth annual seminar on "Clinical Problems of the Newborn" will be held at Good Samaritan Hospital, Cincinnati, Ohio on April 13. The morning session will include case presentations and informal presentations.

Guest lecturers will include Dr. Ivan Diamond, Dr. William Cochrane and Dr. Joseph Dancis. There is no registration fee, but those interested in attending are requested to contact Charles V. Pfahler, M.D., Department of Pediatrics, Good Samaritan Hospital, Cincinnati, Ohio 45220.

"Setting Sights for Sight Saving" Theme for April 12-14 Conference

"Setting Sights for Sight Saving" is the theme of the 1967 Annual Conference of the National Society for the Prevention of Blindness to be held April 12 to 14, at the Christopher Inn, Columbus, Ohio. For further information write the Society at 16 E. 40th St., New York City 10016. ◄

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County, District News

Allen

Dr. Leonard L. Lovshin, Chief of the Department of Internal Medicine at the Cleveland Clinic, spoke on "How to Hide a Neurosis" at the Jan. 3 meeting of the Allen County Medical Society. One hundred-thirty physicians and wives attended.

Cass

Dr. Victor Rivera, of Lima, Peru, was guest at the Jan. 9 meeting of the Cass County Medical Society. Dr. Rivera has started practice in Walton, Indiana, at the Sears-Roebuck sponsored building.

Clark

Newly-elected president of the Clark County Medical Society is Dr. Clemente Oca. Dr. Robert K. McKechnie is the new vice-president and Dr. Robert Witt, secretary-treasurer. All of the new officers are from Jeffersonville.

Daviess-Martin

Dr. A. G. Blazey has been elected president of the Daviess-Martin County Medical Society. Other new officers are: Drs. C. R. Farmer, vice-president and C. Philip Fox, secretary-treasurer.

Dearborn-Ohio

Dr. Jean Shutt, psychiatrist, spoke at the Jan. 5 meeting of the Dearborn-Ohio County Medical Society. He gave a general outline of the operation of the newly constituted local Community Mental Health Clinic for the five-county southeastern area.

Delaware-Blackford

Officers of the Delaware-Blackford County Medical Society for 1967 will be: Drs. John R. Stanley, president; Glynn Rivers, president-elect; Jack M. Walker, secretary and Robert Gibson, treasurer. All of the new officers are from Muncie.

Fayette-Franklin

Dr. Perry Seal, Brookville, is the new president; Dr. B. W. Sanders, Connersville, the vice-president and Dr. J. L. Steinem, Connersville, secretary-treasurer of the Fayette-Franklin County Medical Society.

Fulton

The 1967 officers of the Fulton County Medical Society are: Drs. H. H. Rowe, Rochester, president; K. K. Kraning, Kewanna, vice-president and W. L. Knochel, Rochester, secretary-treasurer.

Greene

The Greene County Medical Society has elected Dr. R. E. Moses, Worthington, president; Dr. K. P. Broshears, Linton, vice-president and Dr. H. G. Rotman, Jasonville, secretary-treasurer.

Hancock

Dr. Wilbur Beeson, Greenfield, is the 1967 president of the Hancock County Medical Society. Assisting him will be: Drs. John J. Farrell, Greenfield, as vice-president and Dr. Bob R. Cagle, New Palestine, as secretary-treasurer.

Henry

Dr. John Nurnberger, Chairman of the Department of Psychiatry at the Indiana University Medical Center, spoke on "Depression" at the Jan. 19 meeting of the Henry County Medical Society. New officers of the society are: Drs. James S. McElroy, president; John E. Fisher, vice-president and Phyllis Grant, secretary-treasurer. All of the new officers are from New Castle.

Jay

New officers of the Jay County Medical Society are: Drs. Joseph F. Vormohr, president; Alfonso Lopez, vice-president and J. S. Fitzpatrick, secretary-treasurer. All are from Portland.

Jefferson-Switzerland

Dr. Marcella Modisett is the new president of the Jefferson-Switzerland County Medical Society. Other new officers are: Drs. Elton Heaton, vice-president and Ott B. McAtee, secretary-treasurer. The new officers are all from Madison.

Kosciusko

The 1967 officers of the Kosciusko County Medical Society will be: Drs. Robert D. Dormire, Warsaw, president; Pearl H. Pierson, Silver Lake, vice-president and Roland S. Snider, Warsaw, secretary-treasurer.

Lawrence

Dr. John Reuter is the new president and Dr. Glen D. Ley the new secretary-treasurer of the Lawrence County Medical Society. Both of the officers are from Bedford.

Madison

Newly-elected president of the Madison County Medical Society is Dr. Robert D. Williams, Markleville. Dr. John R. Wagoner. Anderson, is vice-president and Dr. William M. Stinson, Anderson, secretary-treasurer.

Miami

The Miami County Medical Society has elected the following as 1967 officers: Drs. Parker W. Snyder, Peru, president; Maurice D. Sixbey, Denver, vice-president and Gordon S. Crates, Denver, secretary-treasurer.

Montgomery

Dr. Stanley Levin, of Danville, Ill., was the Jan. 19 speaker at the meeting of the Montgomery County Medical Society. His topic was "Development of a Cardiac Care Unit." Dr. Claude N. Thompson is the new president of the society; Dr. V. G. Viray the new vice-president and Dr. W. E. Shannon, secretary-treasurer.

Orange

Officers of the Orange County Medical Society for the coming year will be: Drs. Marion L. Hagan, French Lick, president; C. X. McCalla, Paoli, vice-president and P. T. Hodgin, Orleans, secretary-treasurer.

Posey

Re-elected to their respective offices for the coming year are the following members of the Posey County Medical Society: Drs. Paul Boren, Poseyville, president; John Christ, Mt. Vernon, vice-president and Herman Hirsch, secretary-treasurer.

Pulaski

Dr. H. R. Eshelman, Monterey, is the new president and Dr. E. L. Hollenberg, Winamac, the new secretary-treasurer of the Pulaski County Medical Society.

Putnam

Dr. John Hetherington, Terre Haute, spoke on "Head Injuries" at the Jan. 13 meeting of the Putnam County Medical Society.

Spencer

Dr. John C. Glackman, Rockport, has been re-elected president and Dr. Michael O. Monar, Rockport, re-elected secretary-treasurer of the Spencer County Medical Society.

Starke

Dr. Guy B. Ingwell, Knox, is the new president of the Starke County Medical Society; Dr. Earl Leinbach, Hamlet, the new vice-president and Dr. Allen Palmer, Knox, the new secretary-treasurer.

Tippecanoe

New officers of the Tippecanoe County Medical Society are: Drs. Philip W. Rothrock, president; Hugh Steele, vice-president; Lindley W. Wagner, secretary and Ben Z. Klatch, treasurer. All are from Lafayette.

Wells

1967 officers of the Wells County Medical Society are: Drs. David G. Pietz, president; Charles H. Caylor, vice-president and Donald W. Meier, secretary-treasurer. All of the new officers are from Bluffton. ◄



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n sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or over-stimulation. Its key to success? The Dimetapp formula—Dimetane (brom-pheniramine maleate), a potent anti-histamine reported in one study to have elicited side effects as few as the placebo,* teamed with decongestants phenyl-ephrine and phenylpropanolamine—in a dependable 10- to 12-hour form.

chiller, I. W., and Lowell, F. C.: New England Med. 261:478, 1959.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

Dosage: 1 Extentab morning and evening, or as needed.

Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage. See package insert for further details.

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Generic prescribing allows a third party to choose for you. This does not of necessity ensure therapeutic effectiveness or lowest patient cost.

You can prescribe the quality and purity of ACHROMYCIN® V Tetracycline-Lederle at a cost that is within pennies-a-day of the low-priced generic tetracycline.

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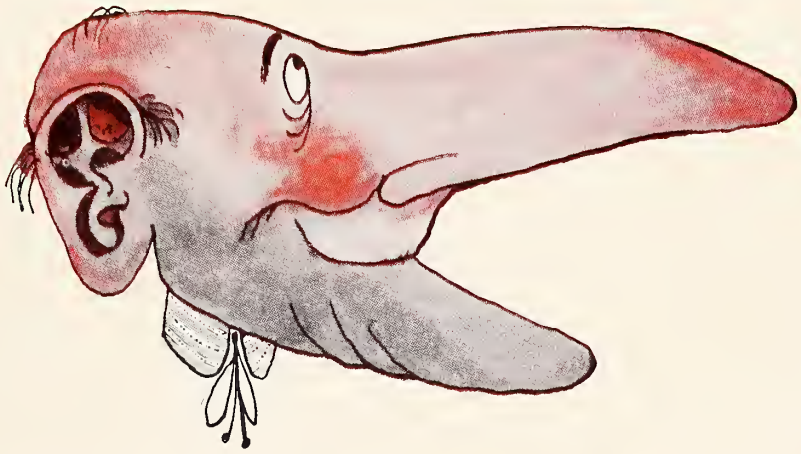
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Otrivin®

(xylometazoline CIBA)
on Rx only







■ quickly relieves congested nose
■ action is gentle, yet prolonged
■ side effects are minimal

INDICATION: Nasal congestion. CONTRAINDICATION: Do not use in patients sensitive to small doses of sympathomimetic substances. WARNINGS: Prolonged or excessive use may cause rebound congestion. Use cautiously in patients with hyperthyroidism, coronary artery disease, hypertension, and diabetes. CAUTION: Do not shake Nasal Spray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water after each use. No more than one person should use the same dropper bottle or nasal spray.
SIDE EFFECTS: Occasional local reactions: rebound congestion, slight burning or stinging, sneezing, dry nose. Occasional systemic effects: headache, drowsiness, lightheadedness, insomnia, palpitations. Overdosage in young children may produce profound sedation. DOSAGE: **Adults:** *Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. *Nasal Spray*—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. **Children under 12:** *Pediatric Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used in infants under 6 months. *Pediatric Nasal Spray*—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. SUPPLIED: OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) *Nasal Solution*, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. *Nasal Spray*, 0.1%; plastic squeeze tubes of 15 ml. *Pediatric Nasal Solution*, 0.05%; dropper bottles of 1 fluidounce. *Pediatric Nasal Spray*, 0.05%; plastic squeeze tubes of 15 ml. *Nasal Solutions* contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. *Nasal Sprays* contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. *Consult complete literature before prescribing.*
CIBA Pharmaceutical Company, Summit, N. J.

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Do your patients
shell out too much
for a diuretic?

The answer may be yes... if they're not on Hygroton. For instance, a therapeutic dose of a short-acting diuretic may cost 3 times as much as an equivalent dose of Hygroton. With Hygroton, in fact, you can usually do the job with just one tablet a day or one every other day. It's no wonder that the trend has been away from short-acting, multiple-dose, high-cost diuretics.

You may hear that a short-acting diuretic was more effective in a 400 mg. (ten-tablet) dose than Hygroton in a 200 mg. (two-tablet) dose.

If one considers maximum recommended doses for each product, tablet for tablet Hygroton was clearly superior. Two tablets of Hygroton were found to produce almost 40% more natruresis and 20% more weight loss than five tablets of the other diuretic.* Note that these are maximum recommended doses!

For effectiveness, economy, and convenience, therefore, Hygroton is the diuretic to choose to start with and the one to stay with.

*Brest, A. N., et al.: J. New Drugs 5:329, 1965.



Natruresis above control values after maximum recommended doses (mEq./24 hours) in "normal" patients

111	152
5 tablets short-acting nonthiazide diuretic	2 tablets Hygroton

48-hour weight loss after maximum recommended doses in edematous patients with congestive heart failure due to arteriosclerotic or rheumatic heart disease

1.84 lbs.	2.2 lbs.
5 tablets short-acting nonthiazide diuretic	2 tablets Hygroton

Indications: Hypertension and many types of edema involving retention of salt and water.
Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.
Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.
Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Side Effects: Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration.
Average Dosage: One tablet (100 mg.) with breakfast daily or every other day.
Availability: Tablets of 100 mg. in bottles of 100 and 1000.
For full details, see the complete prescribing information.
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Deaths

John R. Brayton, M.D.

Dr. John R. Brayton, 67, long-time Indianapolis dermatologist, died Jan. 22 in Methodist Hospital.

An assistant professor of dermatology at the I.U. School of Medicine, Dr. Brayton was graduated from there in 1924. He was a lifelong resident of Indianapolis and was on the staffs of Methodist, General, St. Francis and Community Hospitals. Dr. Brayton was a member of the Marion County Medical Society and the American Academy of Dermatology.

William L. Daves, M.D.

Dr. William L. Daves, Vanderburgh county coroner from 1960 to 1964, died Jan. 14 at the age of 59.

A long-time member of the St. Mary's, Deaconess and Welborn Hospital staffs, Dr. Daves served as chairman of the County Board of Health, president of the Vanderburgh County Medical Society and president of the First District Medical Society. He was graduated from the Washington University School of Medicine in 1932 and began his medical practice in Evansville in 1935.

Fred M. Dukes, M.D.

Dr. Fred M. Dukes, 78, of Dugger, who had practiced medicine in Sullivan county for over 52 years, died Jan. 12.

Dr. Dukes was past president of the staff of Mary Sherman Hospital, the Sullivan County Medical Society and the Aesculapian Medical Society of Wabash Valley. Graduated from the I.U. School of Medicine in 1911, Dr. Dukes began his medical practice at Dugger that same year and had been associated with his son, Dr. Joe Dukes, and his daughter-in-law, Dr. Betty Dukes, in the Dukes Clinic since 1947. A Senior Member of ISMA and a member of the 50-Year Club, Dr. Dukes retired in 1963.

Stanley J. Majsterek, M.D.

Dr. Stanley J. Majsterek, 62, retired Gary physician, died Jan. 1 in Tucson, Ariz.

Dr. Majsterek, graduated from the Loyola University School of Medicine in 1941, had practiced medicine at Gary for 25 years before retiring in 1965. He was a former member of the Lake County Medical Society.

Emanuel E. Marcus, M.D.

Dr. Emanuel E. Marcus, staff member of the Chicago Medical School, died Dec. 28 at his home in Hammond. He was 51.

Dr. Marcus, also a professor of surgery at the Chicago Medical School, joined the faculty there in 1949. He was graduated from the Rush Medical College in 1942 and was on the staff of St. Margaret Hospital, Hammond and Michael Reese Hospital, Chicago. Dr. Marcus was also a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and a member of the Lake County Medical Society.

Homer B. Shoup, M.D.

Dr. Homer B. Shoup, 82, Howard County physician for 56 years, died Jan. 20 at the hospital in Tipton.

Dr. Shoup began the practice of medicine at Sharpsville after being graduated from the I.U. School of Medicine in 1910. He practiced at Sharpsville for 26 years before moving to Greentown where he practiced for 30 years. He had served on the medical staff of Good Samaritan Hospital, St. Joseph's Hospital and Howard Community Hospital in Kokomo. He was a Senior Member of ISMA, a member of the 50-Year Club and the Howard County Medical Society.

Oscar H. Wiseheart, M.D.

Dr. Oscar H. Wiseheart, who practiced medicine in the North Salem area for more than 60 years and was an honorary member of the Witham Hospital and Hendricks County Hospital staffs, died Jan. 14 at the age of 92.

Graduated from the Kentucky School of Medicine in 1898, Dr. Wiseheart opened his office in North Salem that same year. He was a member of the Hendricks County Medical Society, a Senior Member of ISMA and a member of the 50-Year Club. He retired in 1961. ◄

This I Believe About the Drug Industry

The drug industry has made significant contributions to our ability to care for the sick, done basic and worthwhile research in our behalf, and with our help as physicians, is a private enterprise for which we should be grateful. . . .

For the things I dislike about some of their products, the men who represent them, and for some of their overly enthusiastic claims, I shall continue to make my complaints to the drug companies themselves, not to my fellow physicians.

For the many more things that they have done to augment my practice in a wholesome and worthwhile way, I shall continue to support them. In the overall picture, the ethical drug companies are our allies in the private and public practice of medicine.—P. A. Overstreet, M.D., in *The Internist*, (7:8), June-July, 1966.

"I don't know what we would have done without Blue Cross Blue Shield"

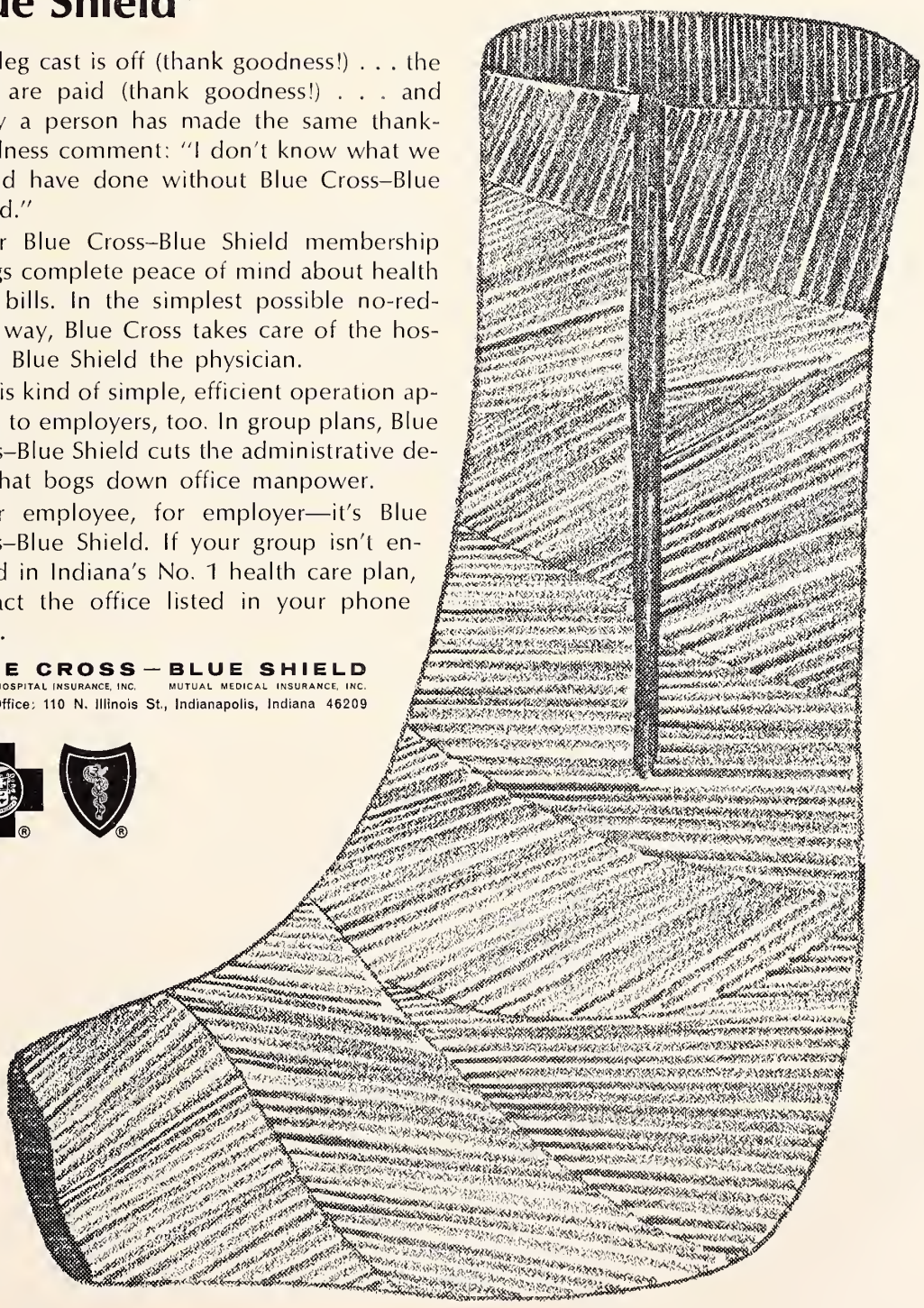
The leg cast is off (thank goodness!) . . . the bills are paid (thank goodness!) . . . and many a person has made the same thank-goodness comment: "I don't know what we would have done without Blue Cross–Blue Shield."

For Blue Cross–Blue Shield membership brings complete peace of mind about health care bills. In the simplest possible no-red-tape way, Blue Cross takes care of the hospital, Blue Shield the physician.

This kind of simple, efficient operation appeals to employers, too. In group plans, Blue Cross–Blue Shield cuts the administrative detail that bogs down office manpower.

For employee, for employer—it's Blue Cross–Blue Shield. If your group isn't enrolled in Indiana's No. 1 health care plan, contact the office listed in your phone book.

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(One of a series of ads being run in key Hoosier newspapers.)

Association News

EXECUTIVE COMMITTEE

January 21, 1967

Present: Ralph V. Everly, M.D., chairman; Burton E. Kintner, M.D.; Eugene S. Rifner, M.D.; G. O. Larson, M.D.; Lowell H. Steen, M.D.; Ottis N. Olvey, M.D.; Lester H. Hoyt, M.D.

Frank B. Ramsey, M.D, editor of *The Journal;* Robert Hollowell, Ralph Hamill, and Robert Robinson, attorneys, and James A. Waggener, executive secretary.

Mrs. John W. Deever, president-elect, Woman's Auxiliary to ISMA.

On motion of Drs. Larson and Steen, minutes of the meetings held October 30 and November 19, 1966, were approved.

Mrs. John Deever, president-elect of the Woman's Auxiliary, appeared before the committee, reviewed the auxiliary's program, and requested a contribution from the association in the amount of $1,000.00 to assist the auxiliary for the balance of this year. On motion of Drs. Larson and Steen, $1,000.00 was awarded to the auxiliary.

On behalf of Mrs. Alfred Scales, president of the Woman's Auxiliary, Mrs. Deever presented the request of the Indiana Mental Health Council for the auxiliary to participate in its membership and fund raising drive. By consent, it was agreed to leave the decision on this matter up to the auxiliary.

Mrs. Deever also presented a letter from Mrs. William Garner, Jr., in which she requested permission to send a copy of "Health Opportunities," a book on careers in the health field, to all Indiana physicians' offices. Upon motion of Dr. Larson, taken by consent, the request was approved.

Membership Report

Number of members as of December 31, 1965	4,394
1966 members as of December 31, 1966:	
Full dues paying	3,892
Residents and interns	116
Council remitted	51
Senior	310
Honorary	3
Military	38
Total 1966 members as of December 31, 1966	4,410
Number of members as of December 31, 1965	4,394
Gain over last year	16
Number of AMA members as of December 31, 1966	4,286
Total 1965 AMA members as of December 31, 1965	4,285
Gain over last year	1
1966 AMA members:	
Dues paying	3,770
Exempt, but active	516
	4,286
Number who have paid state dues but not AMA dues as of December 31, 1966	124
1967 members as of January 20, 1967:	
Full dues paying	1,203
Council remitted	24
Military	26
Senior	14
Residents and interns	52
	1,319

Treasurer's Office

The treasurer reviewed the annual audit, the financial statements for December, 1966, and the statement of cash and fund balances, and the report was approved on motion of Drs. Larson and Steen.

Building Matters

Dr. Everly raised the question concerning making the final payment on the indebtedness of the building amounting to $20,000.00, and on motion of Drs. Steen and Larson, the treasurer and secretary were instructed to make this final payment.

A proposal from the Leslie Engineering Company for the installation of a 3-M product on the windows in the office, to reflect heat and reduce glare, for the price of $384.00, was approved. On motion of Drs. Larson and Kintner, the secretary was instructed to proceed with this installation.

On motion of Drs. Larson and Steen, the investment portfolio is to be referred to the Council Committee on Fiscal Matters.

Legislation

Several matters concerning the Congressional activity were reviewed for the information of the committee, and the secretary called to the attention of the committee the current discussion of the word "prevailing." Upon motion of Drs. Rifner and Steen, the association will define "prevailing" as synonymous with "usual and customary", as it relates to the individual physician's practice and not the community.

The secretary reviewed the correspondence with the Social Security Administration concerning the statement which might be filed with Blue Shield, and the other alternative where a physician might use his own statement in handling welfare cases. By consent, it was agreed that this matter would be referred to the Council.

A letter from Dr. James O. Coursey, Jr., a report from the Cass County Medical Society, a letter from Dr. A. W. Cavins, a letter from Dr. F. J. Kubik, a letter from Dr. Wallace D. Buchanan, a letter from Mr. Robert Hollowell, all concerning welfare matters, were reviewed for the information of the committee.

A letter from the Louisiana State Medical Society was referred to the Council by consent.

A letter from the Onondaga County Dental Society and a statement of policy of the Ohio State Medical Association were reviewed for the information of the committee.

ODMA Matters

The secretary read a letter from the ODMA concerning payment of hospital-based radiologists and by consent the secretary was instructed to make a survey of all radiologists concerning their hospital arrangements in order that he may be able to properly adjudicate their billing for services.

A letter from Dr. Gene D. Moore, Terre Haute, concerning the present policy of ODMA for payment of psychiatric care was discussed and by consent this was to be referred to the Indiana Neuropsychiatric Association for its recommendation.

Organization Matters

On motion of Drs. Larson and Steen, a contribution of $100.00 is to be made to Indiana Health Careers.

On motion of Drs. Larson and Olvey, a $50.00 contribution is to be made to the Indiana Youth Power Conference.

A letter from Dr. Daniel M. Hare, director of Medical Education, St. Mary's Hospital, Evansville, requesting financial assistance in the publication of a brochure on medical education was read and on motion of Dr. Steen, taken by consent, action was deferred on this, pending receipt of additional information.

On motion of Drs. Steen and Rifner, the committee voted to renew the association's sustaining membership in the Student American Medical Association.

A letter from Mr. Hollowell concerning the proposal of the Commission on Voluntary Health Agencies to prepare a brochure listing the agencies approved by the commission was read for the information of the committee.

A letter from the Indiana National Bank concerning the change in interest rates on student loans and recommending that the statement in the interim note, "not to exceed six percent (6%) per annum, simple interest," be deleted, was read. The committee received a report from Drs. Bibler and Irwin, members of the Committee on Student Loan, recommending that this change be made, and upon motion of Drs. Steen and Larson, the change was approved.

A release from the National Association of Residents and Interns concerning a loan program now available through the Chemical Bank New York Trust Company was read for the information of the committee.

The secretary reviewed the plan of the federal government on student loans and also on shortage areas in Indiana for the information of the committee.

The request of the Commission on Voluntary Health Agencies for an appropriation not to exceed $400.000 for conducting a program in conjunction with the Indiana Public Health Association was reviewed and approved by consent.

A letter from the State Board of Health concerning a meeting on February 1 at which representatives of the U. S. Public Health Service will discuss community-based utilization review plans, particularly as applied to the program of medical care for the aged, was brought to the attention of the committee and by consent Dr. Ralph Everly will represent the association.

A memorandum from the Indiana State Board of Health concerning family planning and other matters was reviewed for the information of the committee.

A letter from Mead Johnson Laboratories renewing their offer to provide an award for a scientific exhibit at the 1967 convention was approved on motion of Drs. Rifner and Steen.

A letter from Dr. Marvin E. Priddy concerning a request for information concerning the orientation program was referred to the Council.

A letter from the AMA concerning the creation of an AMA Committee on Health Manpower was read and it was pointed out that the midwest is not represented on this committee, and on motion of Drs. Rifner and Steen, the secretary was instructed to file a complaint with the American Medical Association and to send copies of this complaint to the adjoining states.

Request of the Indiana Academy of General Practice for use of the mailing list to send out announcements on its 1967 annual session was approved by consent.

A letter from the Carroll County Medical Society announcing its adoption of the by-law concerning orientation of new members was read for the information of the committee.

A letter from the Jefferson-Switzerland County Medical Society concerning the indoctrination program was read, and the secretary read his reply, which was approved by consent.

A letter from Dr. Frank Beckel of South Carolina was read and on motion of Dr. Rifner, taken by consent, this letter is to be referred to the State Board of Medical Registration and Examination.

A letter from the Metropolitan Life Insurance Company concerning its policy of paying "usual and customary" fees in several Indiana counties was reviewed for the information of the committee.

The actions of the Board of Trustees of the American Medical Association were reviewed for the information of the committee.

Attention of the committee was called to the minutes of a meeting of the council of the Lake County Medical Society concerning the society going into a bank credit card plan.

Journal

The advertising rates of *The Journal* were discussed. On motion of Dr. Kintner, taken by consent, the committee voted that the advertising rates of *The Journal* should be raised.

A letter from Wyeth Laboratories was read for the information of the committee.

The editor informed the committee of the request of Dr. Soper for funds for the purpose of transcribing CPC conferences for publication in *The Journal*. By consent, action on this request was deferred.

Future Meetings

Public Affairs Conference, Chamber of Commerce of U. S., Washington, D. C., February 1 and 2, 1967. No representative will be sent to this meeting.

63rd Congress on Medical Education, Chicago, February 9-15, 1967. The chairman of the Commission on Medical Education and Licensure will be requested to represent the association at this meeting.

13th Annual Conference of State Mental Health Representatives, February 24 and 25, 1967, Chicago. No representative will be sent to this meeting.

Regional Conference on Disaster Medical Care, February 18-19, 1967, St. Louis. It was decided not to send a representative to this meeting; perhaps Dr. Joe Davis will be in attendance and will represent the association.

Conference on Emergency Medical Services, Chicago, April 6-7, 1967. Dr. Lowell J. Hillis is to represent the association at this meeting.

It was agreed that no one would be sent to the AMA National Congress on Environmental Health Management in New York, April 24-26, 1967.

55th annual meeting, United States Chamber of Commerce, April 30-May 3, 1967. No representative will be sent to this meeting.

There being no further business the committee adjourned, to meet again at 3:00 p.m., Saturday, February 25, 1967.

THE BUDGET COMMITTEE

January 21, 1967

The Budget Committee convened, Saturday, January 21, 1967 in the Headquarters Building with the following members present: Ralph V. Everly, M.D., chairman; Burton E. Kintner, M.D.; Eugene S. Rifner, M.D.; G. O. Larson, M.D.; Lowell H. Steen, M.D.; Ottis N. Olvey, M.D., and Lester H. Hoyt, M.D.

Also present were members of the Council Committee on Economics and Fiscal Matters, consisting of: P. J. V. Corcoran, M.D., chairman; Donald R. Taylor, M.D.; Lowell J. Hillis, M.D., and Robert M. Reid, M.D.

The treasurer reviewed the 1966 fiscal year audit.

The proposed budget for the year 1967 was reviewed in detail.

The General Fund budget was approved on motion of Drs. Larson and Olvey and referred to the Council.

The Journal budget was approved on motion of Drs. Larson and Rifner and referred to the Council.

There being no further business the meeting was adjourned. ◄

THE COUNCIL

January 22, 1967

The Council of the Indiana State Medical Association convened for its January meeting at 10:00 a.m., Sunday, January 22, 1967, in the headquarters office, 3935 N. Meridian St., Indianapolis, with Dr. Lowell H. Steen, the chairman, presiding.

Roll call showed the following present:

Councilors:

First District—P. J. V. Corcoran, Evansville
Second District—Joe Dukes, Dugger
Third District—Donald M. Kerr, Bedford
E. L. Wallace, New Albany, alternate
Fourth District—Robert M. Reid, Columbus
Fifth District—Wilbert McIntosh, Riley
A. W. Cavins, Terre Haute, alternate
Sixth District—William R. Tindall, Shelbyville
Frank H. Green, Rushville, alternate (also AMA delegate)
Seventh District—Albert M. Donato, Indianapolis
John O. Butler, Indianapolis, alternate
Eighth District—Donald R. Taylor, Muncie
Ninth District—Peter R. Petrich, Attica
Tenth District—Lowell H. Steen, Whiting
Herman Wing, Gary, alternate
Eleventh District—Lowell J. Hillis, Logansport
Twelfth District—William R. Clark, Fort Wayne, alternate
Thirteenth District—Otis R. Bowen, Bremen
George B. Gattman, Elkhart, alternate

Officers:

Eugene S. Rifner, Van Buren, president
G. O. Larson, LaPorte, president-elect
Ottis N. Olvey, Indianapolis, treasurer
Lester H. Hoyt, Indianapolis, assistant treasurer

Journal:

Frank B. Ramsey, Indianapolis, editor

Executive Committee:

Ralph V. Everly, Indianapolis, chairman
Burton E. Kintner, Elkhart, member

Guests:

Harold C. Ochsner, Indianapolis, AMA delegate
Eugene F. Senseny, Fort Wayne, AMA delegate
James H. Gosman, Indianapolis, AMA alternate delegate
Robert M. Brown, Marion, AMA alternate delegate
Kenneth O. Neumann, Lafayette, AMA alternate delegate
Dwight W. Schuster, Indianapolis, AMA alternate delegate
Glenn W. Irwin, Jr., Indianapolis, dean, I.U. School of Medicine
A. C. Offutt, Indianapolis, State Health Commissioner
Robert Yoho, Indianapolis, State Board of Health
Glen V. Ryan, Indianapolis, president, Blue Shield
Richard C. Kilborn, Indianapolis, executive vice-president
James Cannon, Indianapolis, Blue Cross
Albert Kelly, Indianapolis, State Director of Public Welfare
Thomas G. Hamilton, Columbia City, vice-chairman, Commission on Medical Economics and Insurance
Andrew J. Bacevich, Hammond
Arthur H. Girod, Decatur
John J. Hartman, Angola
Daniel E. McLaren, Indianapolis

Staff:

Ralph Hamill, attorney
Robert Robinson, attorney
Robert J. Amick, field secretary
Howard Grindstaff, field secretary
Kenneth W. Bush, administrative assistant
James A. Waggener, executive secretary

On motion of Drs. Taylor and Dukes, minutes of the meetings held October 10 and 13, 1966, were approved as printed in the December, 1966, *Journal*.

Reports of Councilors

District meetings were reported scheduled as follows:

First District—Evansville, April 27, 1967
Second District—_____
Third District—New Albany, May 17, 1967
Fourth District—Columbus, May 17, 1967
Fifth District—Greencastle, May 17, 1967
Sixth District—Rushville, _____
Seventh District—_____
Eighth District—Portland, June 7, 1967
(Dr. Taylor reported that this meeting may be held in Muncie, but the date will be the same.)
Ninth District—_____, May 18, 1967
Tenth District—_____
Eleventh District—Logansport, September 13, 1967
Twelfth District—Fort Wayne, May 17, 1967
Thirteenth District—_____

DR. STEEN, Tenth District, as a matter of information reported that the Tenth District had changed its constitution and, last fall, had its first election by mail ballot. Out of 384 dues paying members, 300 ballots were returned. "This is the first time we have had a significant representation in an election; previously when the vote was taken at a meeting, approximately only 10% of the society was voting."

The secretary called attention to Chapter XXVII, Section 6, of the Bylaws which states that if each district society does not notify the headquarters office on or before the January meeting of the Council of the time and place of the annual district meeting for that year, the councilor shall set the time and place of the district meeting.

The chairman announced that the officers are interested in some reorganization of district meetings, to insure a more workable district organization, to stimulate more interest, and to eliminate the many conflicts in meeting dates so that better state level representation can be had at district meetings.

On motion of Drs. Kerr and Dukes, the Council voted to set aside Chapter XXVII, Section 6, of the Bylaws for the time being, "in order to give the officers time to work out something that is adequate."

Unfinished Business

1. *Payment of fees for welfare recipients, under Part B, Title XVIII, PL 89-97.* The chairman, Dr. Steen, reviewed the actions taken by the Council and the House of Delegates in October, 1965, and October, 1966, in approving direct billing for welfare patients, and also the results of recent discussions with the State Department of Public Welfare and HEW officials. A letter from Arthur E. Hess, director of the Bureau of Health Insurance, HEW, suggesting procedures for payment under Title XVIII and presenting a possible compromise, was discussed by the secretary. (Copy given to all Council members).

The executive secretary, Mr. Waggener, explained that under the first alternative the physician sends his bill into Blue Shield. On form 190 Blue Shield determines whether or not the fee is reasonable. If so, Blue Shield will send one check in payment for both the federal and state portion. If the physician is dissatisfied with the allowance made by Blue Shield, under the law he may appeal for a hearing on this particular allowance, but Blue Shield will be the final authority on how much is paid.

Under alternative number two, the physician would file his claim on form 1490. The identification card of the patient will indicate that he is a welfare case. Form 1490 is processed the same as a physician's bill. "If the fee is reduced, say from $200.00 to $150.00, Blue Shield will return the form and ask you to mark it 'Paid in full.' If you choose not to accept the check, you may have the opportunity for a hearing with Blue Shield. In either the first or second alternative, the federal government does not step in until it has, in effect, a paid receipt."

The secretary called attention to the fact that there is a bill in the current session of the legislature to implement Title XIX, and

that Title XIX is going to involve many more persons than Title XVIII. In addition, those persons currently under Title XVIII probably will be transferred over to Title XIX because the federal portion of reimbursement to the state is higher for Title XIX than it is under Title XVIII. Therefore, any decisions made at this time will probably be far reaching in the future of these particular programs.

Dr. Kerr moved that the Council adopt the compromise arrangement as presented by the secretary. This motion was seconded by Dr. Hillis. Discussed by Drs. Kerr, Taylor, Hillis, Clark, Donato and Larson. **Dr. Donato moved the question.** Discussed further by Drs. Taylor and Larson, and the secretary.

On a roll call vote of 14 to 1, the Council approved the procedure outlined by Mr. Hess in his letter of January 10, 1967, for payment under Title XVIII of the Social Security Act of physicians' claims for services to welfare recipients in Indiana.

Following lunch, the Council resumed discussion of the implementation of Title XVIII. The secretary was asked to read a proposed letter, to be sent to all physicians, for Council approval. The letter is as follows:

"To: All members of the Indiana State Medical Association:

"As you are well aware, the question of handling payment to physicians for welfare recipients over 65 has been under constant negotiation and discussion for the past several months. You have received various communications from the president of this association attempting to keep you informed of the various developments as they have occurred.

"After a visit to the Social Security Department in Baltimore, and a delegation from the Social Security Administration in Baltimore coming to Indianapolis, we finally reached an agreement concerning the handling of welfare recipients over 65 under Public Law 89-97. This negotiation resulted in the first time the Social Security Administration approving a program whereby a person other than the actual patient could present a receipted bill, and this is made possible by the fact that, in Indiana, Blue Shield is the common carrier for both the federal portion of the program as well as the state portion of the program.

"This matter was discussed by the Council of the association at its meeting held January 22nd, at which time Mr. Albert Kelly, State Director of Public Welfare; Dr. Glen Ryan, President of Blue Shield; and Mr. Richard Kilborn, Executive Vice President, were in attendance. The Council, by vote, approved the following for use of physicians in handling welfare cases. There was one dissenting vote. The plan, as now approved by your Council, provides that for welfare recipients over 65 the doctor may file on his own letterhead with Blue Shield the following statement:

> "'Until revoked by me, I agree to accept payment under Part B of Title XVIII of the Social Security Act, and agree that the reasonable charge for the services as determined by the carrier will be my full charge for my services to the welfare recipients. I also understand if I believe the allowances to be unreasonable, I have a right to a fair hearing by the carrier in event I am dissatisfied with the carrier's reasonable charge determination.'"

"This is the preferred plan for use by the physicians of Indiana for handling the welfare claims which you are holding for those over 65, and all claims in the future for welfare recipients under Public Law 89-97.

"Under this system a doctor would send this statement on his own letterhead to Blue Shield only one time, or if you prefer, we are enclosing a letter which you may use in filing this statement with Blue Shield, and all it will be necessary for you to do is to sign your name, street address and city at the bottom of the letter. This should then be mailed to Blue Shield — Blue Cross-Blue Shield Building, 110 N. Illinois St., Indianapolis, Indiana. He would then file a regular government form 1490 on each patient he has treated under welfare and send these to Blue Shield. The doctor, in this instance, ignores the question as to whether or not he will or will not accept assignment. Blue Shield will then determine the reasonable charge to be paid the physician and send him one check for his services rather than two checks, as has been customary under the assignment procedure. If the doctor takes exception to the allowances made by Blue Shield, he has a right to a fair hearing concerning the difference between his charge and the allowance as made by Blue Shield upon notice to Blue Shield.

"The second alternative which the Social Security Department and the State Welfare Department have agreed to is that a doctor may submit an itemized statement for his care of a welfare recipient and Blue Shield will make the determination of the allowances allowable as a reasonable fee and send the doctor one check. Under this plan, however, it will be required that the physician then in turn supply Blue Shield immediately with a statement marked 'paid in full.' This is a cumbersome procedure and an expensive one, both for Blue Shield and the physician alike. It also creates many problems and hardships upon the Blue Shield Plan inasmuch as they will not be able to recover from the state and federal government any of their funds which have been advanced to pay the physician until the statement marked 'paid in full' is returned to the Plan.

"It is therefore recommended that physicians file the statement immediately with Blue Shield as outlined. The claims which you have been holding then should be made out on a form 1490, one for each patient. You may put your various services to the same patient on the same claim and send these immediately to Blue Shield for payment. Be sure and give both the Social Security and Welfare ID numbers on the claim.

"In the future, welfare recipients over 65, who are covered by this program, you would merely file on a form 1490 for your services. It should be understood that welfare recipients under age 65, you will continue to file with the local county department of welfare and payment will be made in this instance on the basis of the county schedule which has been agreed upon between your society and the county department. In the case of those over 65 who are now covered under Part B of Title 18 of Public Law 89-97, the fee schedule which has been in use previously between your county society and the county department of welfare will no longer be in effect. The fees to be paid for your services will be the responsibility of the Blue Shield Plan to determine the basis of usual, customary and reasonable.

(Signed) Eugene S. Rifner, M.D.,
President"

Dr. Steen stated that during the lunch hour he and Dr. Rifner had discussed with Blue Shield the two methods agreed on for handling payments for over-65 welfare recipients, and that a commitment had been made with Blue Shield, for which he and Dr. Rifner would take full responsibility, to the effect that a statement would be enclosed in the above letter indicating that the Council endorsed the first method of payment as the preferred method.

On motion of Drs. Petrich and Kerr, the Council approved the letter as read by the secretary, to be sent to all members of the Indiana State Medical Association.

In order to avoid confusion with the 92 county welfare departments in the state, it was agreed that a copy of this letter should be forwarded to Mr. Kelly, State Department of Public Welfare, two or three days prior to sending it to the physicians of the state.

Also, it was proposed that a form letter be included with the above letter which is to be sent to all members, which physicians might use in filing their statements with Blue Shield. This proposed letter follows:

"Blue Shield
Blue Cross-Blue Shield Building
110 N. Illinois St.
Indianapolis, Indiana

"Dear Sirs:

"Until revoked by me, I agree to accept payment under Part B of Title XVIII of the

Social Security Act, and agree that the reasonable charge for the services as determined by the carrier will be my full charge for my services to the welfare recipients. I also understand if I believe the allowances to be unreasonable, I have a right to a fair hearing by the carrier in event I am dissatisfied with the carrier's reasonable charge determination."

Reports of Officers

DR. EUGENE S. RIFNER, President: Mr. Chairman, members of the Council: Since we have so much to say here today, it seems to me we should discuss that which is most pleasant first.

I wish to announce to you that I had the privilege of watching Dr. Olvey and Dr. Everly sign the check which paid off all the loans and mortgages against this, our headquarters building. This has been paid one year early. It gives us assets in excess of one-half million dollars that we have not paid someone else in rent. With a little aside, I should like to tell you that Ralph Everly leaned over and kissed this check.

No one has worked so hard for the building as has Dr. Everly. His efforts have benefited us all. It seems to me that he looks after the building and the grounds and comes over and talks to Jim as if it were his own home.

This devotion to duty has not gone without considerable cost to Dr. Everly. He still states that there are a few, he has a particular name for them, who, in the city of Indianapolis, will not speak to him because of his association with this building. I think the payment is a milestone of accomplishment in this year. It also shows the wisdom of this Council in its appropriation of money and its care in watch-dogging the budget.

I want Jim to hold this note up and Ralph can set the match to it and we're going to get some pictures of this at lunchtime if we can.

I've attended the AMA Convention with the delegation and chaired the delegation. The decision to withdraw resolution #6 reporting pathology and radiology was done by unanimous consent of the delegation. I was quite upset about this and felt that we were railroaded by the Board of Trustees of the AMA and I still feel this way.

I think the AMA and the Pathology Association knew this resolution was in because it was an early one, it appeared as #6. They should have had time to talk to us prior to the last 10 minutes before resolutions were to be presented on the floor. It personally leaves me quite cool for any help to these people in the future. I have fought long and hard, as you know, to make it unethical to practice any other way than direct billing. I no longer feel that they are really behind us and there's no point in pursuing this endeavor at the present time. It seems to me that when we do come out for them, they don't want us to. When we don't, they do.

There are many reasons given why they did not want this resolution, but never have I heard so much double-talking in all my life. I asked their president, Dr. Simard to send me a letter that I might read to this Council as to why this delegation withdrew resolution #6 even though it was instructed by this Council to present it. It's dated November 30, 1966, College of American Pathologists.

"Dear Dr. Rifner: I deeply appreciate this opportunity to meet with the officers of the Indiana medical association. I regret that this meeting has come at a late hour. The College of American Pathologists and its members have enjoyed an exceptionally fine relationship with the Indiana medical association. Nowhere in the 50 states has a state medical association supported our pathologists more than you have in Indiana.

"We thoroughly understand the position of Indiana medical association and its delegates. We gratefully acknowledge the support which you have given us. It is difficult for me to make the request which I am now asking of you and the Indiana delegation. We know full well that your support is available if the need arises. At this particular time, however, it is our opinion, that your resolution in support of the American College of Pathologists is not necessary and we would prefer that it be withdrawn. This request is made with the full knowledge that it can be misinterpreted.

"However, it is very probable that any affirmative action taken by the American Medical Association's House of Delegates on a resolution of the type you have submitted would be excessively damaging to legal motions which will be filed by our attorneys on December 1. It is the opinion of our attorneys that any actions of this type with the House of Delegates of the American Medical Association at this time might well result in other medical organizations being made co-defendants in our law suit. This, in the opinion of our legal counsel, would be most detrimental to a successful defense of our anti-trust litigation as well as to other organizations. It is solely because of these considerations that I am requesting you to withdraw Resolution #6 from consideration by the House of Delegates of the American Medical Association. (Signed) Ernest Simard, President of College of American Pathologists."

I have attended other meetings which are a bit numerous and it would be tedious to mention them here. It would suffice to say that I attended a Blue Shield meeting on Sunday, January 8, and presented the plan for the welfare recipients that we have just discussed. Perhaps this agreement isn't all that we would like to have, but it is a help. I do realize that at the present time I did not make myself sufficiently clear to Glen Ryan or Mr. Kilborn even though I did my best to point out to them that they would need a revolving fund which would, perhaps, involve some of their membership money. This, they stated, was "no problem," but as late as last Friday, found out it might be. I was accompanied on this trip by Dr. Larson, Dr. Steen, Dr. Kerr, Dr. Donato and Dr. McIntosh. These people were the liaison group to Blue Shield and we have with us this afternoon a liaison from Blue Shield.

I do wish to go to one side and talk to you about my Washington trip that I made recently. I went to Washington on Sunday, January 15, and returned here on January 17th. I went as president of the Indiana State Medical Association to a conference on Medical Regional Programs. This is the program which is in the planning stage by the Federal Government at Indiana University. I also went as a member of the advisory group of that plan. I listened intently. One thing that comes to my mind is that we're going to have regional planning, regional hospital planning, regional equipment planning and perhaps even regional distribution of physicians. And that many of these laws have already been passed by Congress and are only a matter of implementation. This group has handed regional planning to the Indiana State Board of Health. The Indiana State Board of Health at the present time is largely subsidized by federal monies.

It would seem to me that we have handed it back to the government and said "Do it yourself, we're not going to do it." Now I think we could continue in this phase if that's what you wish, but I think we should never be able to complain about how it was done. I think our members would have every right to say "Why didn't you have enough foresight to see that they were going to cram this down our throat and why didn't you help write these bills—and these regulations?" This I say to you in all sincerity and honesty, let us take a long look at these regional plans.

I would like to say here that Andy Offutt is our friend. Andy Offutt comes from my hometown, but it is my firm opinion that the voices of Spiceland won't be running the show for a very long period of time. There may be another man there, and we do not know what his feelings might be. I think as long as Andy is there, he's our friend, but we don't know who may replace him nor at what time in this political world. It would be the president's recommendation that a committee of this Council or of one of the commissions be requested to look into all types of health planning for the state of

Indiana and to give a guiding hand as best they can within the confines of the office of the Indiana State Medical Association. Otherwise we are going to get a greater snow job than we already have.

I've attended meetings of the legislative committee which I shall report here. It is my certain feeling that we should put in our own Title XIX bill written by our own lawyers with methods of payment, etc., to our liking, and that we should see that this bill is introduced into THIS state legislature.

The effective date of this recommendation for Title XIX would be July 1, 1969. I would inject here that if the legislature does not implement Title XIX by January 1, 1970, that they will lose all their federal monies. Now why should a president say to an organization that's opposed Medicare and any other form of government intervention that they should put a bill in to implement such within our state? I think it's very simple that the state legislature is going to do this at least by 1969 if they do not do it in this session. The law will be written within the next two years very quietly, very slowly but very powerfully by such departments, no doubt, of the public welfare department. I do not believe that this will be necessarily within our best interests and, in fact, I seriously doubt if it could possibly be.

If we put in a bill now that is to our best interests, making it effective as stated above, we will have a very, very good chance to amend it as Congress changes Medicare laws and Title XIX laws. We will have ample time for those agencies concerned to work out regulations and to bargain with them and to sit down and reason with them concerning these regulations. If we do this, we will have accomplished as much as we can from our own point of view on Title XIX and can assure better patient care for those patients who will come under Title XIX.

However, if we do not, we're going to get the same black eyes we got over opposing Medicare. Someone else is going to do it and we will have it crammed down our throats. We will have men who do not want to practice under Title XIX, the same as they do not want to practice under Medicare now.

I realize full well that there are many people here in this room who will say that this is joining the government and that I have been brainwashed while in Washington. Now, I do not personally believe this to be the case. I have seen the light in Washington and the light is red. It is the danger signal. It means that if we do not step in and write these regulations and help write these bills, they're going to be written for us. We're not going to lose, in Indiana, the federal funds. The legislature has no intention of doing this. They have no intention of increasing property taxes to take care of that loss. They have no intention of losing any federal monies.

There are many people who are eager to write this implementation. These people do not see eye to eye with you and me. We can no longer stick our head in the sand and say "I won't have anything to do with it" or as some counties have said "We're going to practice medicine as we please." I think that they will find out that that destination is exactly where the bureaucrats go to write the regulations and they bring the arguments back to us. There is no way to escape this thing by saying "I won't have anything to do with it."

We felt that way here in Indiana about the AMA writing Medicare laws and regulations. In hindsight, I'm not so sure they went often enough, strong enough, talked long enough, hard enough at all. I do not mean that this means that we should take the ideas and dictates of the welfare department or the Social Security Administration or any other such bureaucracy, into account when we write our bill.

I say that this legislature is our time to implement Title XIX effective July 1, 1969, with our regulations and our methods of billing incorporated into that bill. I realize full well that this could be amended or changed in this session or in 1969, but we might have some difficulty amending or changing one written by the welfare department and passed in 1969.

In summary, I should like to recommend that this Indiana State Medical Association take a long look at all regional planning and do their best to influence and guide them. I would also appreciate their taking another look at Title XIX and the views that I have expressed here. Thank you Mr. Chairman.

DR. G. O. LARSON, president-elect: Mr. Chairman, members of the Council and guests. I have several remarks which I wish to make. The only one which is of real importance is the first sentence. The remarks which our president made and his recommendations, every one of them, have my unqualified and hearty support.

About two or three months ago at a meeting of the Executive Committee, our executive secretary read a letter from the state headquarters office of the AFL-CIO inviting a member of our society to represent medicine at three regional meetings of the AFL-CIO in the state of Indiana.

To be represented were the Social Security Department, Hospital Association, Blue Shield and the ISMA. The panels were to discuss Medicare. One meeting was to be held in Tell City; Pat Corcoran represented us there. One was to be held in Indianapolis and Don Wood was to represent us there. The third one was to be held in Elkhart and I represented the society there. There were about 200 members present, all officers of the AFL-CIO local unions in the northern part of the state. So I gave a talk, perhaps 15 to 20 minutes long, as did each of the panel members. Then there was a period of about two hours devoted to answering questions. I wish to state that the union gentlemen were extremely kind. The state president of the AFL-CIO made some very complimentary remarks. Jim Waggener sent me a letter later from the state AFL-CIO office which commended all three of the doctors who had spoken before these meetings.

Incidently, these meetings, I was informed, were part of a series of meetings which were held all over the United States through which the AFL-CIO was preparing its legislative program for the next Congress, or the 90th Congress, which is in session now.

Well, following the remarks which were made to me personally after the meeting and after I read the letter which Jim Waggener received, I thought maybe I did a pretty good job. About two weeks later, one of my patients brought me this little green sheet of paper entitled "Plain Facts." It's the official publication or official organ of the AFL-CIO local at Bendix in South Bend.

I'd just like to quote to you here: "The chief huckster of this brainwashed session was Dr. G. O. Larson. This Go-Go boy sounded like he was still running for the post of president of the Indiana State Medical Association. He was all things to all people but he didn't miss the slightest opportunity when he saw an opening to swing the ax on Medicare. His sentiment was most novel in that he had the gall to plead with the assembly to take the panel's message back to their membership and urge further communication with members of the panel."

Now I won't quote to you what he said about TeKolste or what he said about Herb Dickson. I got off easy on this, but I did want you to know about it.

As our president mentioned a little while ago, I attended the Blue Shield board meeting and recently I attended a meeting in the bailiwick of the chairman of our Council, the distinguished Senior Senator from Illinois, pardon me, Lake County. In case you boys don't know it, this gentleman can give the most perfect imitation of Senator Dirksen that I have ever heard. Well I had a small part in that meeting.

And I must thank Lowell for a beautiful job of entertaining Mrs. Larson. She did have a ball up there. Both of us did and I appreciate it very very much. That's all gentlemen. Thank you.

DR. OTTIS N. OLVEY, treasurer, reviewed briefly the annual audit, copy of which was handed to each councilor. He called attention

to the fact that the net income at the end of the fiscal year was $45,869.50 rather than the anticipated net income of $3,161.00. Due to this increased net income, the remaining indebtedness on the building ($20,000.00) had been paid.

Dr. Olvey reported balances in all funds, as of December 31, 1966, as follows:

SUMMARY OF ALL FUNDS:

	Cash	*Investments*	*Total*
General Fund	$25,850.76	$123,259.19	$149,109.95
Journal Fund	819.14	—	819.14
Medical Defense Fund	5,118.09	30,000.00	35,118.09
Building Fund	4,060.03	—	4,060.03
Building Fund Auxiliary Donations	3,777.71	—	3,777.71
Student Loan Fund (old)	3,309.46	9,000.00	12,309.46
Kitchen Fund	—	1,771.79	1,771.79
Total	$42,935.19	$164,030.98	$206,966.17

On motion of Drs. Petrich and Corcoran, the treasurer's report was adopted.

DR. FRANK B. RAMSEY, editor of *The Journal*: Mr. Chairman, and councilors: I am happy to say that the 1966 financial statement of *The Journal*, when audited, maintained the same cheery appearance that the general account did. We have just now completed the first quarter of the fiscal year, and it is financially stable this year also.

I have one announcement. Dr. Harold D. Lynch, of Evansville, who has been a very able, dedicated and faithful member of the Editorial Board for many years, wishes not to be a candidate for re-election. He has been retired from practice for several years and he recently retired from his duties with Mead Johnson and Company. He feels separated from the practice of medicine enough so that he does not wish to continue as a board member.

There is one doctor in Evansville with whom many of us are acquainted. I am not in a position of course to make a nomination but I want to mention his name for the purpose of considering him as a candidate. He is Dr. W. D. Snively, who also is not in private practice but who is a young and accomplished internist and is vice-president of Mead Johnson and Company. He is past president of the American Medical Writers' Association and a member of the board of control of that organization. He is widely known for his writing of both medical papers and textbooks. I would like for you to think of the possibility of his being a member of the board.

Report of AMA delegates. Dr. Ochsner discussed briefly the actions of the AMA House of Delegates at its interim session in Las Vegas, November 27-30, 1966. (For complete report, see pages 201-208, February, 1967, *Journal.*)

Matters Referred to Council by Executive Committee

1. Plaques, prepared by the American Medical Association, were presented by Dr. Rifner to the following physicians in recognition of their services in South Vietnam:

ANDREW J. BACEVICH, M.D., Hammond
C. RICHARD BOWERS, M.D., Anderson
ARTHUR H. GIROD, M.D., Decatur
JOHN J. HARTMAN, M.D., Angola
DANIEL E. McLAREN, M.D., Indianapolis
GILBERT H. WHITE, Jr., M.D., Hammond

The plaque reads: "CERTIFICATE OF HUMANITARIAN SERVICE, TO BE PRESENTED TO _____ BY THE AMERICAN MEDICAL ASSOCIATION IN RECOGNITION OF MERITORIOUS SERVICE HE PERFORMED FOR THE MEDICAL PROFESSION, THE UNITED STATES GOVERNMENT AND THE PEOPLE OF SOUTH VIETNAM BY TREATING THE ILL AND INJURED DURING HIS VOLUNTARY MEDICAL MISSION IN PROJECT VIETNAM.

(Signed) CHARLES L. HUDSON, M.D., President,
American Medical Association."

The Council gave these physicians a standing ovation.

2. *Suit against Blue Cross.* This matter was referred to the Council with the Executive Committee's recommendation that the Council approve proceeding with this suit.

On motion of Drs. Taylor and Petrich, the Council voted to support the recommendation of the Executive Committee and directed Judge Hamill to proceed as he thinks best after February 2.

3. *Charters for Kosciusko and Miami counties.* On motion of Drs. Rifner and Petrich, the Council approved the issuance of duplicate charters to the Kosciusko and Miami county medical societies to replace the original charters issued to these societies in 1904 and 1903 respectively.

4. *Budget for fiscal year,* 1966-67. Dr. Corcoran, chairman of the Council Committee on Economics and Fiscal Matters, reported that his committee had met with the Executive Committee on January 21. He suggested that it would be helpful to the committee if, in future years, they could have the budget a week or two before the Council meets.

Dr. Corcoran itemized four things with which the Council Committee on Fiscal Matters proposed to concern itself:

(1) It should serve as an agent of the Council and, in this capacity, should scrutinize the treasurer's reports and the annual budget, and report its findings. If the committee has no questions, the Council can then accept these reports as having been examined and approved.

(2) The committee could serve as an arbiter. "It seems reasonable that there will be matters that neither the Executive Committee nor the executive officers may want to adjudicate. This committee could serve as a useful group to which could be referred items that might be questionable or that might be discussed further, and adjudicated."

(3) "The committee should re-evaluate, periodically, the manner of investment of the funds in order that both the capital appreciation and perhaps better yield might be secured. The employment of investment counsel and utilization of our auditors for professional advice should be considered."

(4) The committee should not carry on a passive role but it should initiate projects as they come up. (Here Dr. Corcoran mentioned, as an example, reconsidering the per diem reimbursement of officers.)

"The committee would like back copies of previous audits, for comparative study, and I would suggest that the members of the Council save these audit and budget brochures and bring them to the next meeting of the Council, should we have further items to present. . . . We would welcome direction, as to how far you want us to proceed."

On motion of Drs. Corcoran and Kerr, the report of the Council Committee on Economic and Fiscal Matters was approved.

On motion of Drs. Corcoran, Kerr and Taylor, the budget for 1966-67 was approved.

5. *Definition of "prevailing fee."* Inasmuch as it is apparent that the use of the term "prevailing fee" will become increasingly important in months to come in many of the federal programs, the Executive Com-

mittee recommended that the Council adopt the following definition:

"The term 'prevailing' shall be construed as the same and synonymous with our present definition of 'usual and customary' and shall be limited to the current pricing practice of the individual physician. 'Reasonable' is also synonymous with 'usual and customary.'"

On motion duly made, seconded by Dr. Donato, this recommendation of the Executive Committee was adopted.

6. *Letter from Louisiana State Medical Society.* Dr. Everly read a letter from the Louisiana State Medical Society, addressed to presidents and secretaries of all state medical associations, requesting all state associations to contact their congressmen and senators on a certain date in "one grand blitz, asking for their cooperation and urging that they work diligently toward changing the legislation" which will allow direct billing under Title XIX.

Dr. Kerr's motion that the ISMA have nothing to do with this plan was lost for want of a second.

Dr. Kerr then moved that the Louisiana plan be adopted by Indiana; motion seconded by Dr. Taylor.

On motion of Drs. Corcoran and Donato, the matter was tabled.

7. *Orientation program.* Dr. Everly reported that the Executive Committee had received some inquiries and much correspondence regarding the orientation program, and he read the following letter, received December 29, 1966, from Dr. Marvin E. Priddy, Fort Wayne, chairman of the Commission on Special Activities:

"James A. Waggener, Executive Secretary
Indiana State Medical Association
"Dear Sir:

"The Commission on Special Activities has thus far carried out the following. We are attempting to determine if a meeting and dinner once annually on a state level for all new physicians starting practice in Indiana in the preceding year would be helpful in their indoctrination into the practice of medicine in our state. *Our commission feels that each new physician could profit by more knowledge into the makeup of the Indiana State Medical Association, its executive set-up and where and how new physicians can contribute to the overall welfare of the Indiana State Medical Association. We have not been able to determine if funds could be made available for the meeting and dinner or whether it could be sponsored by one of the reliable drug companies.* However, we feel the meeting should be of no expense other than transportation to and from to the new physician.

"In addition, the committee also is attempting to learn a little more about the blood bank serving our state. It is hoped that this commission will be able to meet on a suitable date to most members in February.

Sincerely,

(Signed) MARVIN E. PRIDDY, M.D.,
Commission Chairman."

The chair ruled that this matter would be discussed later in the meeting, when the Council Committee for Orientation of New Members presented its report.

Economic and Organization Matters

1. 1966 *membership report by districts*, as follows, was presented:

MEMBERSHIP REPORT
INDIANA STATE MEDICAL ASSOCIATION
December 31, 1966

DISTRICT	Members ISMA	# Delegates, Session 1967	AMA	Gain or Loss over 1965 ISMA	Gain or Loss over 1965 AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Members Non-Elig.
1st District:									
Gibson	14	1	13	−1	−1		1		
Perry	8	1	8	−1	−1		2		
Pike	4	1	4				1		
Posey	8	1	8	−2	−2				
Spencer	4	1	3					1	
Vanderburgh	234	5	232	−2			6	6	1
Warrick	7	1	7				1	1	
Total	279	11	275	−6	−4		11	8	1
2nd District:									
Daviess-Martin	19	2	17	−1	−1	1		1	
Greene	14	1	7	−2	−2		2		
Knox	41	1	38	+3	+2		1	1	
Owen-Monroe	69	2	67	+8	+9		1	8	
Sullivan	14	1	13	−1					
Total	157	7	142	+7	+8	1	4	10	
3rd District:									
Clark	43	1	40	+3				6	
Dubois	21	1	18	−3	−3	1			1
Floyd	39	1	38	+2	+2			2	
Harrison-Crawford	10	2	10	−1	−1				

DISTRICT	Members ISMA	# Delegates, 1967 Session	AMA	Gain or Loss over 1965 ISMA	Gain or Loss over 1965 AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Members Non-Elig.
3rd District (Cont'd.)									
Lawrence	25	1	23	+1	+2		1		
Orange	9	1	9						
Scott	5	1	5	+1	+2			4	
Washington	7	1	7						
Total	159	9	150	+3	+2	1	1	12	1
4th District:									
Bartholomew-Brown	50	2	49	+4	+4		1	2	
Dearborn-Ohio	20	2	19					1	
Decatur	10	1	9	−1				2	
Jackson-Jennings	24	2	22				1	3	
Jefferson-Switzerland	29	2	28	+1	+1	3	3	3	
Ripley	9	1	6		−1			1	
Total	142	10	133	+4	+4	3	5	12	
5th District:									
Clay	12	1	12	+1	+1				
Parke-Vermillion	23	2	23				1		
Putnam	17	1	17	+2	+2			1	
Vigo	116	2	116	−4	−4	2	1		
Total	168	6	168	−1	−1	2	2	1	
6th District:									
Fayette-Franklin	15	2	15	−1	−1			1	
Hancock	23	1	23	+1	+2		1		
Henry	34	1	34	−5	−4		1	4	
Rush	15	1	15	+1	+1				
Shelby	19	1	19	−1		1	1	3	
Wayne-Union	68	2	65					3	1
Total	174	8	171	−5	−2	1	3	11	1
7th District:									
Hendricks	20	1	20	−2	−2			1	
Johnson	29	1	28		−1			1	
Marion	1067	21	1064	+9	+11	4	11	57	1
Morgan	20	1	19	+2	+2	1		1	
Total	1136	24	1131	+9	+10	5	11	60	1
8th District:									
Delaware-Blackford	117	3	109	−7	−10			3	1
Jay	15	1	13		−1			2	
Madison	103	2	81	+2	−15	2	8	7	
Randolph	20	1	18	−1	−2		1		
Total	255	7	221	−6	−28	2	9	12	1

DISTRICT	Members ISMA	# Delegates, 1967 Session	AMA	Gain or Loss over 1965 ISMA	Gain or Loss over 1965 AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Members Non-Elig.
9th District:									
Benton	8	1	8	−1	−1				
Boone	19	1	19					1	
Clinton	20	1	20					1	
Fountain-Warren	14	2	14	−1	−1				
Hamilton	20	1	15	−4	−1	2		1	
Montgomery	27	1	27					2	
Newton	5	1	5						
Tippecanoe	132	3	130	+7	+8	4	2	6	
Tipton	11	1	11						
White	11	1	11	−1	−1				1
Total	267	13	260		+3	6	2	11	1
10th District:									
Jasper	7	1	7						
Lake	437	9	417	−3	+1	9	5	10	2
Porter	44	1	44	+12	+12			3	
Total	488	11	468	+9	+13	9	5	13	2
11th District:									
Carroll	9	1	9	+1	−1				
Cass	32	1	32	−5	−5	1	1	2	1
Grant	67	1	66	−3	−3			4	
Howard	73	1	73	+5	+5		2	3	1
Huntington	22	1	22	−3	−2		2		
Miami	14	1	14					4	1
Wabash	28	1	27	+3	+3		2	1	
Total	245	7	243	−2	−1	1	7	14	3
12th District:									
Adams	14	1	14			1			
Allen	296	6	292	+2	+1		5	5	2
De Kalb	23	1	23						
LaGrange	7	1	7				1	1	
Noble	16	1	16	−1	−1		1	2	
Steuben	13	1	13	−1	−1				
Wells	43	1	41	+6	+2	1		1	
Whitley	17	1	17						
Total	429	13	423	+6	+1	2	7	9	2
13th District:									
Elkhart	108	2	106		+1	1		11	
Fulton	11	1	11		+2		1		
Kosciusko	16	1	16	−3	−3			3	
LaPorte	101	2	95	+1	−3	1		7	
Marshall	26	1	26	−1	−1	1	1	3	
Pulaski	6	1	5	+1	+1		1		
St. Joseph	236	5	236			2	5	8	1
Starke	6	1	6	−1	−1				
Total	510	14	501	−3	−4	5	8	32	1

SUMMARY

1st District	279	11	275	−6	−4		11	8	1
2nd District	157	7	142	+7	+8	1	4	10	
3rd District	159	9	150	+3	+2	1	1	12	1
4th District	142	10	133	+4	+4	3	5	12	
5th District	168	6	168	−1	−1	2	2	1	
6th District	174	8	171	−5	−2	1	3	11	1
7th District	1136	24	1131	+9	+10	5	11	60	1
8th District	255	7	221	−6	−28	2	9	12	1
9th District	267	13	260		+3	6	2	11	1
10th District	488	11	468	+9	+13	9	5	13	2
11th District	245	7	243	−2	−1	1	7	14	3
12th District	429	13	423	+6	+1	2	7	9	2
13th District	510	14	501	−3	−4	5	8	32	1
Total	4409*	140	4286	+15	+1	38	75	205	14

*Plus one honorary member, Dr. Dwight Murray, Napa, California, not in this number. Reports include 3 honorary members and 48 full dues paying members who are out of the state.

2. *Remission of state dues.* **Requests for remission of state dues of six members in the Seventh District, four because of ill health and resultant forced retirement, and two because of missionary assignments, were approved on motion of Drs. Donato and Petrich.**

Dr. Clark's motion to exempt from payment of dues a member of the Twelfth District who has moved out of the state was seconded by Dr. Kerr, put to a hand vote, and lost.

DR. HILLIS: It should be pointed out that the Bylaws of the association stipulate that financial hardship is the only basis on which dues can be remitted. **By consent, the Council agreed that it is incumbent upon each councilor to bear in mind this requirement before he requests remission of state dues, and if the request does not comply with this rule, it should not be presented.**

3. *Nomination of two members for Editorial Board,* for three-year term ending December 31, 1970, to succeed Drs. Harold D. Lynch, Evansville (surgery), and Jene R. Bennett, South Bend (pathology), whose terms expire December 31, 1967.

Dr. Corcoran nominated Dr. W. D. Snively, Evansville (pediatrics and industrial medicine), contingent on Dr. Snively's acceptance, to succeed Dr. Lynch.

On motion of Drs. Corcoran and Kerr, the name of Dr. Jene R. Bennett, South Bend (pathology) was presented as a nominee to succeed himself for the three-year term ending December 31, 1970.

4. *Reports of Commissions and Committees.*

a. *Commission on Medical Economics and Insurance.* Dr. Thomas G. Hamilton, vice-chairman of the Commission on Medical Economics and Insurance, discussed the association's disability insurance program with the Continental Casualty Company, and read a letter, in part, received on January 20, 1967, from J. Russell Townsend, Jr., administrator of the program:

"Commission on Economics and
Insurance of the Indiana State
Medical Association
"Gentlemen:

"This is an interim report on the progress of the insurance program of the Indiana State Medical Association providing disability income benefits to the membership and underwritten by the Continental Casualty Company.

"As you know, last fall we were able to work out with the insurance company a revision in the coverage to provide disability income benefits extending to age 65 for sickness and for life from accident. This has enabled us to much more thoroughly promote the program and I am happy to report improved results.

"You have noticed the advertising campaign which has been undertaken in your *Journal* and each of you undoubtedly has received advertising both at your office and home concerning the revised program and urging enrollment under it. This program will continue during the spring and will be supplemented by visitations to county and other meetings.

"The result of this increased advertising activity and the improved insurance plan itself already have produced forty (40) additional enrollments. These are in various stages of issue by the Continental Casualty. In some instances it has been necessary to obtain additional medical history from the applicants resulting in a delay in the consideration of their applications.

"A procedure has been worked out with your office which will make it possible to individually write and further contact each newly elected member to the ISMA. Last year 159 new members were elected. As you know, the provision for new members of your association is as follows:

'New members of the association, under age 40, who enroll in the INCOME REPLACEMENT PROGRAM within one year after joining ISMA will be assured of monthly benefits of at least $300.'

"We believe that the vigorous solicitation of these members will be most beneficial in obtaining additional enrollments and also in bringing in younger men which in turn will keep the loss experience in a satisfactory condition."

DR. HAMILTON: The rest of the letter is mostly summarizing. . . . Now, the problem is that the House of Delegates, by its action in October, 1966, terminated this program as of April 1, 1967, if it did not show evidence of 1,600 accepted applicants. We, as a commission, did not feel that the 1,600 was an arbitrary figure to be reached, but merely one that, if reached, would give those physically disabled, uninsurable members some sort of insurance coverage, and I think now we must come to the Council for some clarification of what is going on. . . . The number enrolled is in excess of 300.

On motion of Drs. Kerr and Petrich, the Council voted extension of the enrollment period until the next House of Delegates meeting.

b. *Commission on Legislation.* Dr. Dwight W. Schuster, chairman, reported that the Legislative Commission was functioning well and that bills of interest to the medical association to be placed in the legislative hopper were moving satisfactorily.

DR. SCHUSTER: The primary matter for the commission at this time is the implementation of Title XIX; I had given my view on this to the Executive Committee and to Dr. Donato's Council committee, and perhaps it would be appropriate to have

Dr. Donato's report and then if there is some need for clarification from me, I'll attempt to answer questions.

Dr. Albert M. Donato, chairman of the Council Committee for the Study and Implementation of Governmental Medical Programs, presented the following report:

This Council committee met Saturday, January 21, in the headquarters office of the Indiana State Medical Association.

Present were: Albert M. Donato, chairman; Robert M. Reid, Donald R. Taylor and William R. Clark. Absent: Otis R. Bowen and Peter R. Petrich.

The committee studied a letter received from Dwight W. Schuster, chairman of the Commission on Legislation, and recommends that the points brought forth in this letter, which is attached, be implemented by legal counsel of the Indiana State Medical Association and that further implementation be carried out by legal counsel to amend the present proposed Medicaid Law.

This report is respectfully submitted by the committee:

"Gentlemen:

"In my position as chairman of the Legislative Commission, the following are my thoughts on the legal implementation of Title XIX of the Medicare Law. At the last meeting of the House of Delegates of the Indiana State Medical Association, Resolution #32 was adopted, establishing the following principles in regard to the implementation of Title XIX. I will take up the six points individually.

"1. The right of the patient to select his own physician and medical facility should be guaranteed. In the proposed bill for implementation, Section 2, Par. C, does spell out such a guarantee. However, in Section 3 of the bill, the welfare department is given the authority 'to take such action and adopt such procedures as necessary to insure equitable treatment of all applicants.' I believe this may be interpreted that the welfare department may contract for services much as they have in the past, like with the General Hospital in Indianapolis. Mr. Arthur Hess has been quoted as stating that the free choice of physician and facility is something which is under local jurisdiction. Therefore, in order to guarantee this first point, the bill would have to spell out in Section 3 that free choice of physician and facility shall not be altered by welfare department regulations. This, of course, depends upon whether the policy and philosophy of the state medical association is to this effect, or whether contract arrangements such as now existing are to be accepted.

"2. The question of a Medical Advisory Committee to the state and local welfare departments is probably handled through provisions of Chapter 432 of the Act of 1963. This was spelled out in the Public Assistance Manual supplement of June, 1965, page 25. This directed that there would be a Medical Advisory Committee composed of various groups. It did not specify the number of physicians. It did strongly recommend that the local or county welfare boards adopt and appoint similar local boards for advisory purposes.

"3. Item 3 stated that there should be a full-time doctor of medicine as medical director in the state welfare department. There is nothing in the present proposed bill or in the Regulations of 1965 that I could find, but I believe that such a position is already in existence from other laws. This would have to be checked further.

"4. Re: The patient not being required to have prior authorization in order to obtain emergency medical service: Section 7, 8 and 9 of the proposed bill deals with regular application for medical assistance. The Regulations from the welfare department, again of June, 1965, do spell out how emergency situations may be handled. I believe that this same approach would be used by the welfare department because of the authority granted to them in Section 3 of the proposed bill.

"5. This is the most controversial point. The Resolution directed that the principle for reimbursement of physicians be on the usual and customary fee basis, and this is covered in the proposed bill under Section 4. The second point, however, — that mechanics be included to permit direct billing of the patient by the physician — is not present. The bill provides for vendor payment, that is, statement sent by the doctor to the state department of welfare, who then authorizes payment. Therefore, if direct billing is required, then Section 4, starting at Line 11, would have to be changed to something like: 'The State Department of Public Welfare shall certify fee statements from recipients of medical assistance to the Auditor of State, who shall pay to the vendor of services the amount of the fee for the services from the Medical Assistance Account of the General Fund of the State Treasury.' Regulations could spell out that these statements then could be used for the state to obtain reimbursement from Blue Shield for any part, if any, the carrier should pay. This would allow the doctors to bill patients directly, who in turn, would forward the bill to the welfare department, who would direct the auditor to pay the doctor. Of course, if the recipient of medical assistance was irresponsible, he might not forward the statement.

"6. That a non-profit or other health insurance carrier be utilized in the implementation of the program. This is authorized in the proposed bill in Section 4.

"I believe that if the changes suggested in the above can be worked out through legal assistance that then the bill could be introduced and this would satisfy the requirements laid down by the House of Delegates. I think there is some advantage to introducing a bill this session rather than awaiting 1969, because then with the definite pressure for passage because of time limitation, the state medical association might not be in as opportune circumstances to obtain these points. Another feature which has been mentioned is that if this bill is passed that the implementation date can be set far enough in the future that Regulations can be drawn up and gone over in consultation with the state medical association whereby any "bugs" could be worked out before the actual implementation.

Respectfully submitted,
(Signed)
DWIGHT W. SCHUSTER, M.D.,
Chairman, Legislative Commission"

DR. DONATO: **I present this report for passage and for implementation.** The new Medicaid Bill was presented to the state legislature just last Friday. **(Motion duly seconded.** Discussed by several.)

The motion to implement the recommendations of the Council Committee on Governmental Medical Programs was put to vote and carried.

The chairman of the Council commended the Council Committee on Governmental Medical Programs upon the excellence of the job it had done.

Dr. Schuster, as a matter of information, discussed the proposed bill to broaden the present law pertaining to abortions, which is to be submitted to the legislature.

Dr. Reid moved that "at least the Commission on Legislation be encouraged to explore the possibilities of expanding or liberalizing the abortion law of this state." Motion seconded by Dr. Kerr, put to vote, and carried.

c. *Committee on Student Loan.* In the absence of Dr. Lester D. Bibler, chairman, the Council accepted as a matter of information the following report from the Committee on Student Loan:

The Committee on Student Loan has held one meeting since the October, 1966, annual convention, at which time six students were interviewed and were granted loans, five for $1,000.00 each, and one for $600.00.

Under the Guaranteed Loan Plan with the Indiana National Bank, which was instituted December 1, 1963, the association has on deposit with the bank $20,810.00 to guarantee loans totaling $260,125.00. Up to this time, December 31, 1966, 65 loans, totaling $54,600.00, have been granted under this plan.

At its meeting on November 20, 1966, the committee discussed the American Medical Association's change in policy regarding loans to persons in medical training. Due to the sharp decline in the availability of money

for loans for all kinds, two of the three banks in the AMA-ERF loan guarantee program have terminated their agreements to lend money through the program. The third bank, Continental Illinois National Bank and Trust Company of Chicago, has stated that it must limit aggregate new loans to the amount being repaid on outstanding loans. . . . Effective November 1, loans under the AMA-ERF program were limited to $750.00 per borrower per year, and the interim interest rate was increased from six percent to seven percent. The increase in interim interest rate does not affect loans made previously, and the payout interest rate will remain at seven percent.

The ISMA Committee on Student Loan feels that the demand and need for loans at the state level will increase considerably as a result of this action of the AMA.

Also discussed at the November 20, 1966, meeting of the committee was the effect of the delay in processing loans because of the difficulty in getting the full committee together for a meeting. It was thought that the making of loans could be expedited if the committee had an Executive Committee, composed of members living in Indianapolis, who would be subject to call and who could even be contacted by telephone concerning the making of a loan. On motion duly made and seconded, the committee voted to appoint such a committee, consisting of the Indianapolis members of the Student Loan Committee, and to empower these members to pass upon loans and then report their actions to the full Committee on Student Loan.

A report on the original Student Loan Fund under association management from October, 1955, to December 31, 1963, follows:

Total loaned to 117 students..$58,458.36
Total repaid by loanees as of
December 31, 1966..... 47,056.19
Total amount outstanding,
December 31, 1966.....$11,402.17

Of the 117 who received loans —
85 have repaid in full
* 22 are making payments
* 4 have made no payments
6 are still in internships (repayment not due until July, 1967)

* Payments due on above mentioned 26 loans still outstanding — total $9,152.17.

LESTER D. BIBLER, M.D., Chairman
GLENN W. IRWIN, M.D., Vice-chairman
ROBERT HOLLOWELL, Secretary
EUGENE S. RIFNER, M.D.
OTTIS N. OLVEY, M.D.
JAMES O. RITCHEY, M.D.
P. J. V. CORCORAN, M.D.

d. *Future Planning Committee.* The following report was accepted as a matter of information:

December 20, 1966

In response to your request for information concerning the activities of the Future Planning Committee, this is to advise you that the report of the Future Planning Committee which was made to the House of Delegates in October fairly well summarized the actions and the activities of the committee up to that point.

Concerning the future plans of the committee, the committee is planning a meeting for February. The exact date has not yet been set.

At that time, the committee will begin a study of the following specific problem areas: (1) organization of county and district medical societies and the problems of lack of interest and participation, (2) the specific problem of district medical societies and their problems of attendance and programming, (3) motivation of physician to more actively participate in the affairs of his medical society at all levels; county, state and national, (4) the evaluation of programs presently being conducted within the commission framework of the Indiana State Medical Association and (5) evaluation of the present commission structure.

We feel that with this program we have established for ourselves, through the direction of officials of the state medical association, a long-range and complicated series of problems which will take considerable study.

e. *Commission on Voluntary Health Agencies.* The following report was accepted as a matter of information:

December 16, 1966

In response to the president, the following report is submitted on the activities of your Commission on Voluntary Health Agencies:

(1). We have had three meetings—elected officers—and have assigned members of the commission in liaison to each of the 13 recognized voluntary health agencies operating in Indiana;

(2). Have recognized the urgent need to publicize the findings and work of this commission, not only to the profession but to the laity. The commission feels that much of its work is being hidden unless this is done. Has made a request to legal counsel for recommendations on proper means for accomplishing this, and has referred the entire idea to the Commission on Public Information for assistance;

(3). Developed the idea of a placard for all member doctors' offices, listing voluntary health agencies recognized by this association and has referred this idea to legal counsel and the Public Information Commission;

(4). Expressed the desire of the commission to have its members included on programs in the district and county societies whenever possible; also has volunteered the services of the members of the commission in the orientation of new members;

(5). Offered to the Commission on Convention Arrangements to secure speakers for the next annual meeting to be obtained from national voluntary health agencies and has expressed the desire that if this is done the program should involve the lay members of the voluntary health agencies;

(6). Started plans for a very provocative medical program in cooperation with the voluntary health agencies to be presented on Wednesday morning, April 26, 1967, as a part of the annual program of the Indiana Public Health Association.

The commission feels a great need for help from the Council to assure the attendance of the physicians at this program. Detailed information on the program will be supplied at a subsequent meeting.

The next meeting of the commission will be on January 29 and will be a combined meeting of representatives of all the voluntary health agencies.

NORMAN R. BOOHER, M.D., Chairman

The chairman of the Council called attention to a letter from the legal counsel which accompanied this report which "relates to the matter of placards for physicians offices. He has warned us about the dangers of libel. The Executive Committee has referred this back to the Commission on Voluntary Health Agencies for its perusal."

f. *Commission on Public Health.* The following report was accepted as a matter of information:

The Commission on Public Health met on October 30, 1966, and considered matters referred to it by the reference committee and the House of Delegates, as well as other pertinent business, including election of commission officers and appointment of certain consultants. These matters are included in the following report.

It is anticipated that the commission will be especially active in the fields of public health as regards some of the newer developing areas.

In this regard the commission has been in contact with the technical secretary of the Stream Pollution Control Board with the request for more specific information in certain areas and an endorsement of the proposed water criteria already received. It was felt that this is a step in the right direction and is a significant factor in the health and well-being of the communities.

The plan for adequate sewage disposal does not receive the attention that the distribution of water does, yet particularly in the southern part of the state, this poses an even greater problem to avoid pollution of the surfaces, as well as deep waters.

Members of the Council are cordially invited to participate in the Junior-Senior Day activities on April 1.

There are many other areas of consideration and cooperative ventures for which we will seek guidance from the Council as the programs become developed. Included in these are the program of the Indiana Association for Retarded Children—mass measles immunization and the program of the Crossroads Rehabilitation Center for training of nurses and paramedical personnel in the fields of rehabilitation.

The commission has carefully considered the proposal for a cooperative meeting with the school superintendents and physicians involved in medical policies and school health programs. We ask the Council's guidance as to whether or not this should be proposed in conjunction with or as a separate meeting from the state convention or either professional group. It was felt that with the increasing involvement of the schools in the problems of health care through special projects and proposed basic changes in the state law, such a conference is of considerable, imminent importance.

THOMAS O. MIDDLETON, M.D., *Chairman*

COMMISSION ON PUBLIC HEALTH

The Commission on Public Health convened at 11:00 a.m., Sunday, October 30, 1966, at the Columbia Club, following a general, called meeting of all commissions and committees of the Indiana State Medical Association by the president, Dr. Rifner.

The minutes of the March 26, 1966, commission meeting were unanimously approved.

Those present at the meeting were Drs. T. O. Middleton, R. M. Seibel, Henry G. Nester, Theodore C. Person, Berniece M. Williams, John E. Schreiner, Glen D. Ley, Cleon M. Schauwecker and T. Neal Petry.

There were brief summary reports from the sub-committees of 1965-1966.

The next order of the business was the organization of the new commission and the election of officers for the coming year. The following officers were elected: Thomas O. Middleton, M.D., chairman; T. Neal Petry, M.D., vice-chairman and Berniece Williams, M.D., secretary.

The committees for the coming year were named as follows: Committee on Industrial Medical Practice; Environmental Health; Preventive Medicine; School Health; Traffic Safety; and Rural Health and Physician Placement—with Dr. Middleton reviewing some of the topics and activities which come under each committee.

The first subject under old business was "V.D.-LSD Control Law." It was argued that the Minors' Consent Law is of lesser importance because physicians still would have to have the consent of the parents for treatment of a minor with venereal disease. It was agreed that the public health aspect of venereal disease requires some consideration of a consent law as related to diagnosis and contact follow-up.

The next subject was Junior-Senior Day, which will be held April 1, 1967 at the Columbia Club—it was urged that there be a little more cooperation with the speakers for this activity.

The next was the consideration of Report on Disposition of Deceased Physicians' Practice—this matter was referred to the Legislative Commission and the Woman's Auxiliary.

There was a discussion of disability determinations regarding tuberculosis patients. This matter was referred to the Committee on Industrial Medical Practice for further study.

Dr. Middleton reported on the meeting of the committee regarding the cardiac registry to be included as a part of the regional program on Heart Disease, Cancer and Strokes.

Next was a report of the meeting regarding medical participation in the newer school programs of federal government support with Dr. Rice from the office of the State Superintendent of Public Instruction. Mechanisms for closer cooperation of professional groups were presented and will be developed by the Committee on School Health.

The commission then considered the annual report of the Commission on Public Health and the reference committee report concerning distribution of pertinent publications of the ISMA. This was referred to the Committee on Rural Health and Physician Placement for the preparation of specific details necessary to carry out the recommendation as adopted by the delegates and emphasized in Dr. Rifner's statement of October 30.

The School Health Program for the 1967 convention was discussed. The Commission on Convention Arrangements is to be queried directly as to whether or not we will be involved in the 1967 convention.

The public health aspects of new recreational areas, such as the projects for the upper Wabash in the north central part of the state and Monroe Reservoir in the south central portion were presented. It is thought that these areas are posing serious problems which require a multiple disciplinary approach as well as a multiple county approach for adequate solution and for application of effective preventive medicine. In line with this the commission was in receipt of a communication from Mr. B. A. Poole, technical secretary of the Indiana Stream Pollution Board regarding the development of a water quality criteria. The proposed criteria will be evaluated and comments regarding this sent to the Commission on Legislation for their consideration during the forthcoming legislature.

The time for the next meeting is tentatively set for February 8 or 9 (2:00 p.m.) This meeting will be necessary to firm up the final plans for Junior-Senior Day.

The meeting adjourned at 2:30 p.m.

5. *Dr. Neumann's suggestion,* as approved by the House of Delegates in October, 1966, that district meetings should be revised so that more time is allowed for ISMA officers and staff to brief the district members, **was referred, by consent, to the Executive Committee for implementation.** In his presidential address, Dr. Neumann stated further: "Perhaps the ISMA should select the dates so the many conflicts in date we have had can be eliminated. Suggestions have been made that the ISMA should prepare a format and take it to each meeting. This type of program should be informative to all members — especially if time for 'questions and answers' can be provided. I believe it would increase attendance and stimulate interest in district meetings."

New Business

Grievance Committee matter. The chairman reviewed briefly the correspondence on a matter which Dr. Bowen, councilor of the Thirteenth District, had referred to the Grievance Committee, and which Dr. Philip Reed, chairman of the Grievance Committee, had in turn referred to the chairman of the Council. The chairman of the Council said he had given much time to the study of the case and felt that "Dr. Reed's opinion should be upheld since it is a matter of surgical privilege and local confidence, rather than a matter of medical ethics." **By consent, the Council concurred in this opinion, and agreed that the matter should be referred back to the county medical society.**

Reports of Guests

DR. GLENN W. IRWIN, Jr., Dean, Indiana University School of Medicine: Mr. Chairman, Dr. Rifner earlier this morning referred to the fact that Indiana has received a regional medical program planning grant. This amounts to $821,505 for a two-and-a-half-year period of time. I think Indiana has been fortunate in receiving this grant and that perhaps to a great extent, it presents an endorsement of our earlier planning for a state-wide system of medical education, which this society has certainly supported.

I would like to point out briefly that we have attempted to implement segments of this state-wide system of medical education before any formal endorsement or any funding by the state legislature. I think many of you already are feeling some impact of this effort. Most of you are aware of the system of teletype information service from the medical school library and the state library. This had been a remarkably popular thing and the large number of requests have almost overwhelmed our library personnel. But it is encouraging to see free use of this educational resource.

I think in recent months there has been a considerable increase in what I refer to as "circuit riding" in which members of the faculty travel over the state discussing either the plan or actually helping to conduct scientific programs. In several areas of the state there is in operation a pilot program of elective credit courses for senior and junior medical students. This is not an "off-quarter" exercise. In several areas, there is considerable planning for extending this type of elective work for medical students throughout the state. I hope the regional program, now that it is funded, will accelerate the tempo of graduate and continuing medical education throughout the state.

There has been a telephone communication network started in which medical grand rounds each Wednesday morning at 11:00 o'clock are sent to several areas of the state. Currently, Evansville, Muncie, Princeton, Terre Haute and Indianapolis are participating. On the last Wednesday of each month the conference will be a clinical pathologic conference, and those communities that are participating in this program will receive the protocol of the CPC plus pictures, illustrations of electrocardiograms, x-rays, etc., several days in advance. I hasten to point out that this is a two-way telephone system. I think the Council previously discussed the question as to whether or not there should be any funding from the state medical association for this program and my answer today is "no" at the present time.

Lastly, I would observe that this is somewhat a period of anxiety so far as the school and the university are concerned because of the status of the recommendations in the State Budget Committee. At the present time, from a capital standpoint, the school of medicine has been approved for approximately 50% of its proposed building program. The thing that concerns me most is that to delete from our proposal the needed addition to the medical school building will not allow us to add the necessary additional members to our faculty in the coming year.

At its October, 1966, meeting at French Lick, the Indiana State Medical Association did, I think, endorse wholeheartedly the philosophy of strengthening our one school and the basic principles of the Indiana statewide plan. I would like to emphasize again the university's position so far as a second or a third medical school is concerned, as was clarified in the brochure of the *Medical Quarterly of the Indiana University School of Medicine.*

It states:

"The I.U. statewide medical education plan is needed now. The proposal has not been offered in opposition to eventual establishment of another medical school if it is determined that one is needed. Should the legislature authorize future development of a second medical school, it should become a part of a statewide medical education system."

If you approve of the actions of this organization, I hope that you will discuss those things with your senators and representatives which you endorsed last October. Thank you very much.

MR. JAMES CANNON, of Blue Cross, reported on the status of the ISMA Blue Cross-Blue Shield group policy. Copies of the financial statement and statistical information as of November 30, 1966, were distributed to the councilors. Mr. Cannon announced that the contract will be renewed for another year at the same rates that were in effect in 1966.

The Council accepted Mr. Cannon's report as a matter of information.

MR. ALBERT KELLY, Director, State Department of Public Welfare, addressed the Council briefly, saying he was pleased to know that the Council had accepted the procedure outlined by Mr. Hess of HEW and it was his hope that ISMA would emphasize to all physicians of the state, by letter, the importance of making this program work.

DR. GLEN V. RYAN, President, Mutual Medical Insurance, Inc., reported that 1966 had been a progressive year for Blue Shield. He presented figures showing a substantial increase in assets, investments, membership, and income, at December 31, 1966, over the same date in 1965. Blue Shield paid out $28,136,000. for physicians' services in 1965, and the estimate for 1966 is $31,000,000. Medicare payments from July 1 to December 31, 1966, amounted to $1,814,379. The total number of claims processed in 1965 was 746,334, and the estimate for 1966 is 763,144, or an increase of about 17,000 claims. Medicare claims totaled 109,035 in 1966.

"We have had some problems, but Medicare has not interfered with the regular business as much as one might think. We will have to admit that the length of time it takes from the time claims are sent in until the doctors get their checks has gone up a little, and there are certain reasons for this. Claims with the coordination of benefit clause sometimes require much correspondence and these claims can be delayed as much as 15 to 60 days. Another factor in delay of checks coming through is incomplete information. The third thing, some of the industrial groups withhold their premium checks from two weeks to a month in order to collect interest on the amount due Blue Shield. Until that money comes in, these claims cannot be processed.

"The fourth thing is the radiology and pathology problem, where we receive a bill from the hospital and also a bill from the doctor. It takes time to match up these items."

MR. RICHARD C. KILBORN, Executive Vice-President, Mutual Medical Insurance, Inc., spoke on Medicare problems and procedures. This was also discussed by Drs. Kerr, Petrich and Senseny, with many questions being asked of Mr. Kilborn concerning the handling of welfare claims.

DR. A. C. OFFUTT, State Health Commissioner: Mr. Chairman, members of the Council and guests: I have about three things to mention to you and solicit your aid on one of them specifically.

Item 1. Some years ago, I was involved in the discussion at the federal level of the necessity of re-establishing the portions of the Federal Public Health Law, with regard to the continuation of federal grants. I'm not going to bore you with the discussion concerning this, but this has now come alive in Public Law 89-749. The title of the bill is "Comprehensive Health Planning and Public Health Services Amendments."

Some significant letters have been written to Governor Branigin concerning the passage of this act and what will happen in Indiana. Having been aware of the passage of the act I had sent a letter to Governor Branigin asking that the State Board of Health be appointed to administer the planning portion of the law. Now, there are several methods that the state can use to handle this. One is to appoint an existing agency; another is to appoint a consolidated agency and third, to set up a separate agency.

My encouragement, the first time to the Governor, was that we be named, but that the interest of other agencies, and these were spelled out, the Department of Mental Health, and medical education, be represented as their interests did appear. In other words, the agency which would be named by the governor would be, in fact, the responsible agency to which he could turn but also that agency would, of course, be governed by the needs and the wishes of, for example, the Department of Mental Health, especially in mental health, mental retardation and medical education.

On January 6, I had a letter from Governor Branigin, stating that the Indiana State Board of Health will be charged with the accomplishment of comprehensive health planning.

I would hope, Mr. Chairman, unless you see some need for it, I wouldn't ask that anything officially be done, but I would certainly hope that I could have the blessing of the Council and the Indiana State Medical Association in this charge for planning.

Dr. Petrich's motion **"that the Council put its implicit faith in the abilities of Dr. Andrew Offutt and that we support him in his stand in this particular project" was seconded by Dr. McIntosh.**

Dr. Taylor asked for more information.

DR. OFFUTT: There isn't much else I can

ell you. We will set about appointing an dvisory group which the law requires; state ıedical will certainly have representation. 'urther than this, I can't tell you. I don't :now what it will involve.

Dr. Larson offered an amendment to he motion: "That the chairman of the Council be authorized to appoint a pecial Council committee to work with)r. Offutt in helping us solve all these roblems which he has described to us." The amendment was seconded by many, ut to vote, and adopted.

The motion to permit this agency to all under the purview of the State Board of Health was then put to vote, nd carried.

DR. OFFUTT: Let me say one word about he amendment. There are many other items f interest but time limitation dictates I ot discuss them now—the committee is elcomed.

Item 2. At the deaf school, for whose administration you know we are now responible, unfortunately, we have begun to see he upsurge in the number of deaf children s a result of the German measles epidemic few years ago. We've also been apprised f the fact that we haven't seen anything ther than the beginning; that there will e many more of these children come to ur attention as they arrive at school age. We've been concerned about the incidence f measles and about the complacency with hich measles is accepted. Then, of course, ith the development of the measles vaccine, ıe mental retardation people, I suspect, ere the group that spearheaded the idea ıat we should have a mass vaccination proram against measles. I talked to your execuve secretary, Mr. Waggener, about this. We've used the Schwartz strain here in Indina now for over a year and we've asked that ny untoward reactions he reported and ıere have been none reported. I would like, Ir. Chairman, the privilege to read our roposed measles vaccination program and ıen solicit the Council's approval.

PLAN TO ERADICATE MEASLES
(RUBEOLA)
FROM INDIANA IN 1967

1. With the approval of the Indiana State Medical Association, a cooperative effort be launched to eradicate measles from Indiana in 1967. Such cooperative effort would be contingent upon the Indiana State Board receiving an emergency appropriation of $600,000.00 from the Indiana General Assembly.
2. The Indiana State Medical Association would notify all component societies of their recommendation of this immunization program. Local societies would be urged to develop and spearhead the development of a plan for their respective counties in cooperation with their local health officer(s).
3. Measles vaccine would be requisitioned by the local health officers from the Indiana State Board of Health.
4. Vaccine furnished would be the further attenuated, live rubeola vaccine in a single dose package, complete with a disposable syringe and needle.
5. The decision as to how the program should be implemented, i.e., in physicians' offices or schools, kindergartens or a public clinic would depend upon the plan adopted by each county medical society in conjunction with the local boards of health.
6. Emphasis on giving vaccine would be to those one through six, but vaccine should be given those one through 12 years who have never had measles or received measles vaccine.
7. No charge to be made for vaccine.
8. Physicians in each county should decide in their plan if they will charge a fee or donate their services in this community effort pending funding by the legislature or other source.
9. Vaccine will be made available for these programs of county medical societies and crash programs in epidemic areas until June 30, 1968.
10. No reports will be required of the individual physician by the state or local health departments. The local health officers will certify in a letter to the State Board of Health "that to the best of their knowledge, all measles vaccine requisitioned by them was administered without charge for vaccine to children age one through 12 years of age."

Dr. Hillis moved, seconded by Dr. McIntosh, that the plan as outlined by Dr. Offutt for eradication of measles from Indiana in 1967 be approved by the Council.

Discussed by Drs. Clark and Reid.

DR. OFFUTT: This is going to be called a mass vaccination program, no doubt about it. We've been on record and are still, as far as I'm concerned, on record against these mass programs. Having the material to prevent measles we felt we'd be remiss if we did not encourage a definite, concerted effort to get widespread use of the vaccine. Now, it's not a mass vaccination program in the sense that some of these things were in the early polio vaccine days, but it will be so interpreted by many. I prefer to call it increased emphasis on measles vaccination with increased effort in public education.

Dr. Reid commented that this plan "puts us in a position of approving, essentially, a local option mass immunization program in those cases where the local group chooses to do that. We are in essence approving that at a state level." The chairman of the Council agreed that this is true.

DR. REID: Previously, Andy, haven't you just made, for instance in the field of gamma globulin, you've made gamma globulin available for indigents and so on through the State Board of Health?

DR. OFFUTT: You've never been asked to approve, specifically, programs like you're talking about, gamma globulin to the indigent, but you have been asked before about this kind of program. We've gone into the '55 program on polio, and I believe the record will show this, that I appeared here before we did it and part of the discussion was much like Dr. Reid mentions.

Discussed further by Dr. McIntosh.

The motion for adoption of the measles eradication plan was put to vote and carried.

DR. OFFUTT: *Item* 3. With the passage of the Medicare Act, there was one portion of this which had to do with home health agencies. This is the program which we have talked about here over the years as "independent living." There has been little demand for this program up to now. I predict that this demand will increase as the load increases in hospitals and nursing homes and there is a need for out-of-hospital care for the patients.

In an effort to keep this kind of program as well under medical scrutiny as possible, we encouraged local health departments to establish this kind of program. There is a little kicker in the conditions of participation, which says that the agency operating the program must have at least two procedures involved: nursing and one other therapeutic program. They can contract for the second therapeutic service, but they must provide the nursing service themselves. There are about seven health departments in Indiana which have qualified for certification and with the operation of this program under the federal act, the levying and collection of fees is contemplated.

In 1965, we asked for and got an amendment to the local health department law, the so-called reorganization bill in section 11, provided for the collection of fees. The attorney general has recently ruled that the provision of this service and the fees therefor are illegal, the reason being that the state law makes no provision for this type service.

Well, having a significant number of health departments concerned about this, I discussed this and talked to the governor about it and as a result an amendment to the Public Health Code has been introduced in the General Assembly which will provide for this kind of care being given by a local health department. Fees may be collected for the service, pursuant to the provisions of Section 11 of the Reorganization Act. My idea was that those health departments who could do this would be allowed to do it

legally. If there are any comments, Mr. Chairman, I'd be glad to hear them.

Item No. 3 was discussed by several, following which the Council accepted it as a matter of information.

Dr. Corcoran asked Dr. Offutt, since he had mentioned deafness, "if we should take cognizance of news items about possible impairment of hearing in younger people from mechanically augmented music, and if this is valid, if there is anything perhaps we should take cognizance of and at least refer it to our Commission on Public Health?"

DR. OFFUTT: Well, I've taken cognizance of it to the point where, personally, I am sympathetic but, actually, we are going to try to look into it a little bit with some of our hearing people and see if there is anything to it. I don't know that there is.

DR. KENNETH O. NEUMANN, representing Dr. Dennis Megenhardt, Blue Cross Professional Advisory Board: Most of the remarks on Blue Cross, in general, have already been presented by the Blue Cross-Blue Shield group. However, there are a couple of things I should mention. First of all, Blue Cross now has $54 million dollars in assets; secondly, I have received a number of questions in my area about the physician who is over 65 whose dependents are under 65, and I have been assured that these individuals under 65 will be carried under the group contract.

Matters from Council Committees

1. *Council Committee for Orientation of New Members.* Dr. Albert M. Donato, chairman, presented the following report, which, **on motion of Drs. Rifner and Kerr, was referred to the Commission on Special Activities for further action:**

The Council committee met Saturday, January 21, 1967, to consider possihle programs for the orientation of new members.

In its deliherations the committee expressed the opinion that an orientation course for new members should include:

1. Explanation of the organizational structure of county, district, state and AMA organizations.
2. Explanation of services given the public and society members.

The following is therefore recommended hy the committee as a basis for the formulation of such programs at the county, district and state society level.

ORGANIZATION STRUCTURE

County Society

Officers
Board of Directors
Executive Committee
Delegates to ISMA
Standing and special committees

SERVICES

Magazines, pamphlets, membership directories
Telephone answering service
Group disability income insurance
Employment service for office, nursing and lab personnel
Referral service
Emergency call service
Copying and addressograph service
Help in ethics and grievance matters
Assistance in malpractice litigation
Speakers bureau
Assistance in public relations, socio-economics and legislation
Placement and office location service
Specialty, AMA, city, county and criss-cross directories
Liaison with medical school, hospitals, health insurance plans, voluntary health and civic agencies and Woman's Auxiliary
Free notarizations
Fiscal accounting for revenues and disbursements
Membership records
Meeting arrangements
Information service for members and the public
Minutes of committee meetings
Building management
Liaison with ISMA

ORGANIZATION STRUCTURE

District Society

Officers
ISMA Councilor
Blue Shield Board member

SERVICES

Scientific and social meetings
Source of ISMA Councilor and Blue Shield Board member

ORGANIZATION STRUCTURE

ISMA

Officers
Councilors
Executive Committee
House of Delegates
Commissions

SERVICES

Journal, Newsletter, pamphlets, directories
Liaison with AMA
Legislative lobbying
Assistance in malpractice litigation
Placement service for physicians
Annual scientific sessions
Help in public relations, socio-economic ar
legal matters
Liaison with state governmental, voluntai
health, professional and civic organizatio
Group life insurance
Fiscal accounting for revenues and disburs
ments
Membership records
Meeting arrangements
Building management
Minutes of commission meetings
Liaison with Woman's Auxiliary
Agent for medicare for military dependent
Scientific exhibits

ORGANIZATION STRUCTURE

AMA

Officers
Trustees
House of Delegates
Councils and commissions

SERVICES

Journals, newspaper, magazine
Scientific information on new drugs, therap
research, foods and nutrition, physic
medicine, cosmetics, pesticides, poisor
etc.
Physician placement service
Practice aids
Library reference service
Representation in Washington
National meetings on a wide variety
of matters affecting the medical professi
and the health care of the nation
Student loan program
(This would be an enormous list and o
has only to see the table of contents
the AMA's semi-annual directory to reali
how widespread the organization's acti
ties are).

This report is respectfully submitted
the Committee for Orientation of Ne
Members.

ROBERT M. REID
WILLIAM R. CLARK
JOE DUKES
ALBERT M. DONATO, *Chairm*

2. *Council Liaison Committee with Bl*
Shield. Dr. Kerr, chairman, brought t
matters to the Council for action:

(1) The Physicians' Relations Comm
tee of Blue Shield has received requests f
office assistants of osteopathic physicians
be invited to the seminars which Blue Shie
holds for physicians' office assistants.

Dr. Kerr moved that this procedu
be approved by the Council. Motion du

conded. Following discussion by Drs. cIntosh, Kerr and Petrich, Dr. Kerr ithdrew his motion, with permission of e seconder.

Dr. Taylor then moved that Blue nield "work this out to their own satis-ction." Motion seconded by Dr. Cor-oran, put to vote, and carried.

(2) Blue Shield Seminar, April 22 and , Indianapolis Athletic Club, Indianapolis. r. Kerr said he thought the Council should well represented at this seminar, which is r physicians, and at which emphasis will on medicare problems, including welfare. hey anticipate having some significant ople from HEW there to speak."

3. *Council Liaison Committee with Blue ross.* DR. TAYLOR, chairman: Most of the ints that I have to discuss have already en covered in some detail, but to bring em together, I'll read this report that I ve prepared:

This report covers basically the September d December meetings of the Blue Cross ard of directors. Points of interest to the uncil include the following:

Mr. Spring reported that the claim volume der medicare has exceeded the original timates, and the staff of the Medicare partment is being further expanded to eet this problem.

He noted that many hospital-based physi-ans in several Indiana hospitals have ne-tiated a direct billing arrangement on n-medicare cases. In 19 hospitals, radiol-gists now bill for the professional com-nent, with the hospitals billing for the lministrative component of the charge. four hospitals, the radiologists bill for the tal charge. In four hospitals, the pathol-ogists bill for the professional component of laboratory charges, and in nine hospitals, the pathologists bill for the total charge. These billings are processed by the Blue Cross staff, and payment is made by Blue Shield for these services.

He further stated that this new system presented some administrative problems, but the staff reports that physicians have been most cooperative in making the program work out satisfactorily. Under this new system, an increase in the total cost of the service seems inevitable, but efforts are being made to hold this increase to a minimum.

At the same meeting, the chairman of the Blue Cross Rate Committee "looked with alarm" at the loss of control in the matter of professional fees in the hospitals where the hospital-based physicians had instituted separate billing.

At the December board meeting, Mr. Spring announced that Blue Cross had received, through their counsel, Mr. Byron Emswiller, a letter from Mr. Ralph Hamill, the attorney for the Indiana State Medical Association, which stated the ISMA was going to initiate a suit for a declaratory judgment during the week of November 14, 1966, on the problem of the Blue Cross-Blue Shield fee shift. He noted at the time of the December Blue Cross board meeting that no further action had occurred on this matter.

Your liaison committee would urge that this Council act, both in attempting to get hospital-based physicians to forcefully move ahead in their changeover and also for the Council to authorize our attorneys to go ahead with the legal action recommended.

A start has been made to get the captive physicians' fees transferred from Blue Cross to Blue Shield. Unless the initiative can be maintained during 1967, with many more radiologists and pathologists changing over, we will lose this battle by default.

To emphasize the need for continued action and pressure against Blue Cross, I report that Indiana Blue Cross has signed contracts with six outpatient psychiatric clinics in Indiana and is negotiating with six others to provide insurance coverage for services rendered. This coverage will not only include the clinic fees, but also the professional fee for the psychiatrists' professional services. This is certainly a backward step. I believe that the Council should object to Blue Cross for writing a contract to cover professional fees in these clinics and should also direct a letter to the Indiana Neuropsychiatric Association outlining the ISMA position on this matter and requesting their cooperation.

Mr. Chairman, I move the acceptance of this report.

Respectfully submitted,
DONALD R. TAYLOR, M.D.

Dr. Taylor's motion was seconded by Dr. Petrich, discussed by Dr. Neumann, put to vote, and carried.

The secretary was instructed to write a letter to the Indiana Neuropsychiatric Association, and to protest to Blue Cross, as outlined in Dr. Taylor's report.

Date for Spring Meeting

The date of April 9, 1967, was selected for the next meeting of the Council, by consent.

There being no further business, the meeting was adjourned, on motion of Drs. Corcoran and Dukes. ◄

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ANESTHESIOLOGIST: 38-years-old, Board eligible, experienced, university troined, desires primarily fee for service, private practice preferred. Available sometime in the next 12 months. Write Box 336, The Journol, Indiana State Medical Association, 3935 N. Meridian St., Indionapolis, Indiana 46208.

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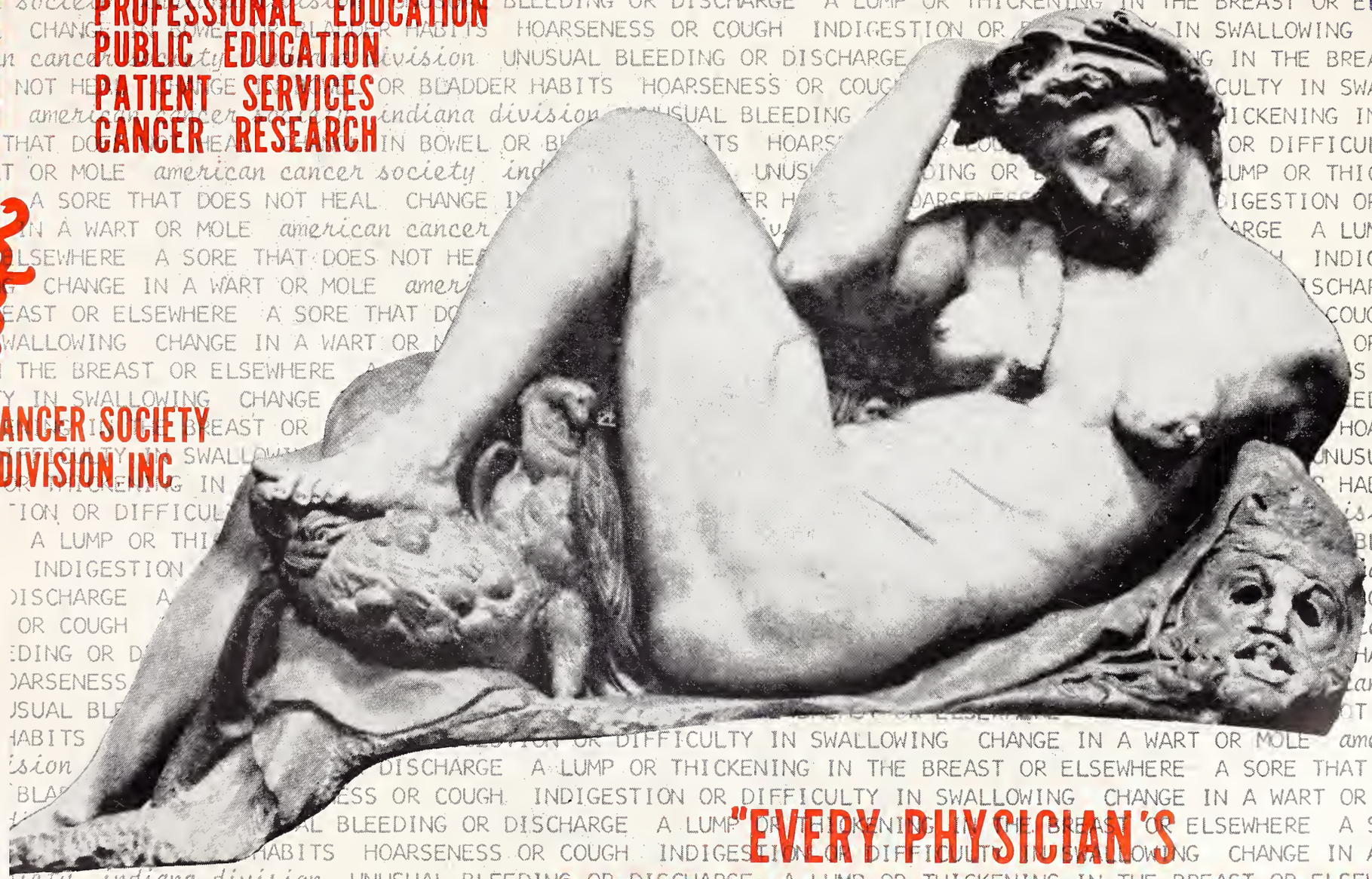
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JOURNAL
OF THE INDIANA STATE
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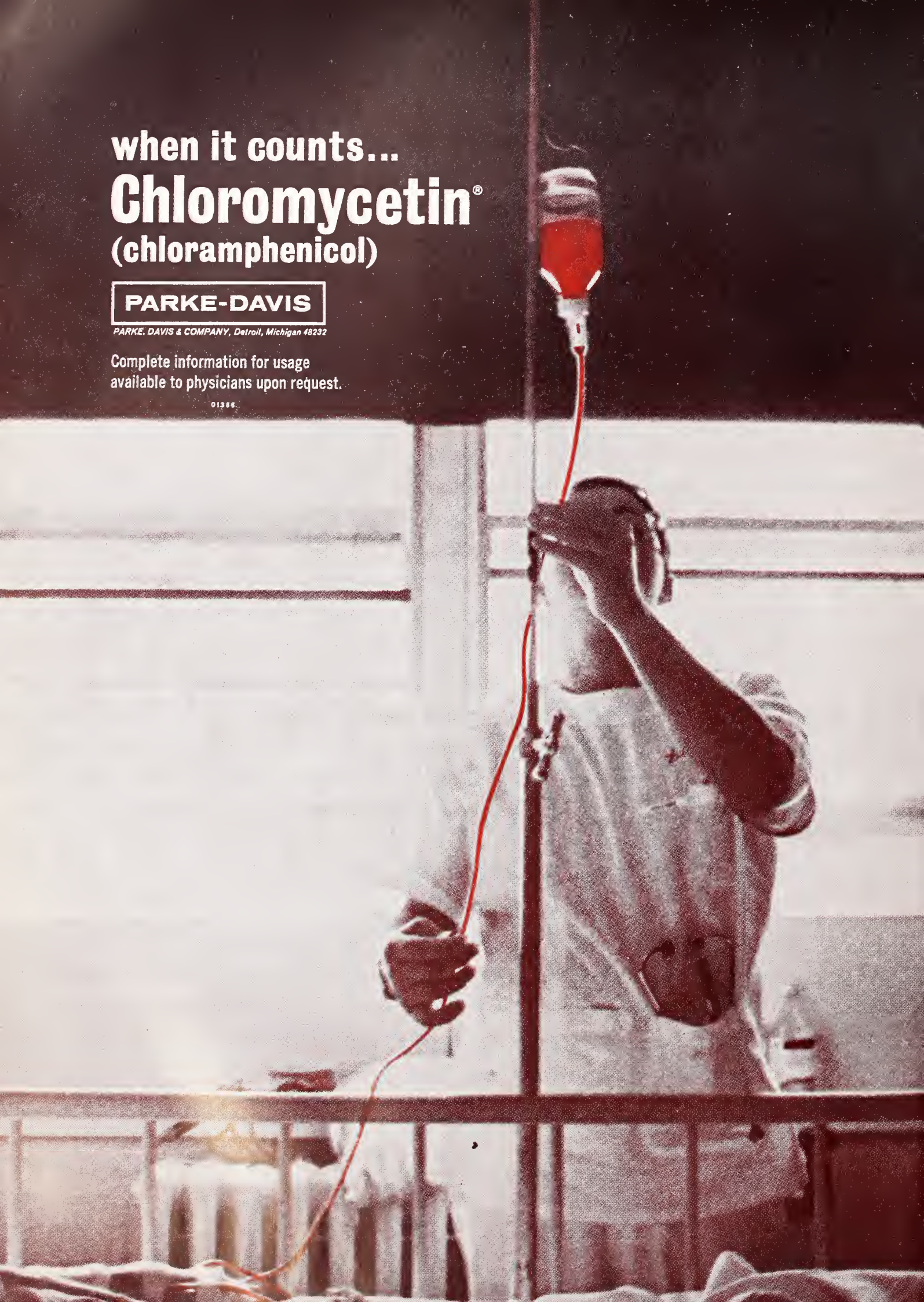
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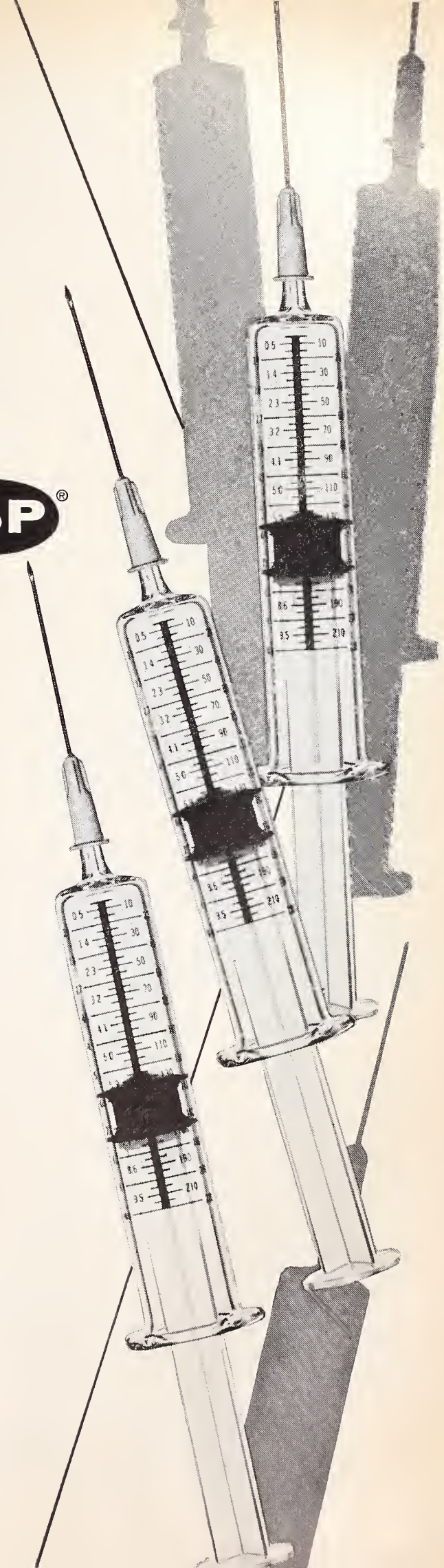

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APRIL 1967

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

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Entered as second closs mott January 25, 1933, at the Postoffi at Indianapalis, Indiana. Copyrigh 1967 by the Indiano State Medic Assaciation. Published monthly 3935 N. Meridian, Indianapol 46208.

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Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?

in any case,
usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.d.
(initial adult dose)

Indications: Urinary tract infections caused by gram-negative and some gram-positive organisms.

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Precautions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. **Pending further experience, like most chemotherapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or severe impairment of kidney function.** Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Bacterial resistance may develop.

When testing the urine for glucose in patients receiving NegGram, Clinistix® Reagent Strips or Tes-Tape® should be used since other reagents give a false-positive reaction.

Dosage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times daily) for one to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. daily. Children may be given approximately *25 mg. per pound* of body weight per day, administered in divided doses. The dosage recommended above for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month should not be treated with the drug.

How supplied: Buff-colored, scored Caplets® of **500 mg. for adults,** conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 1000. **250 mg. for children,** available in bottles of 56 and 1000.

References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on request. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Antimicrobial Agents and Chemotherapy—1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

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eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
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*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas[2]...However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

THE INDIANA STATE MEDICAL ASSOCIATION

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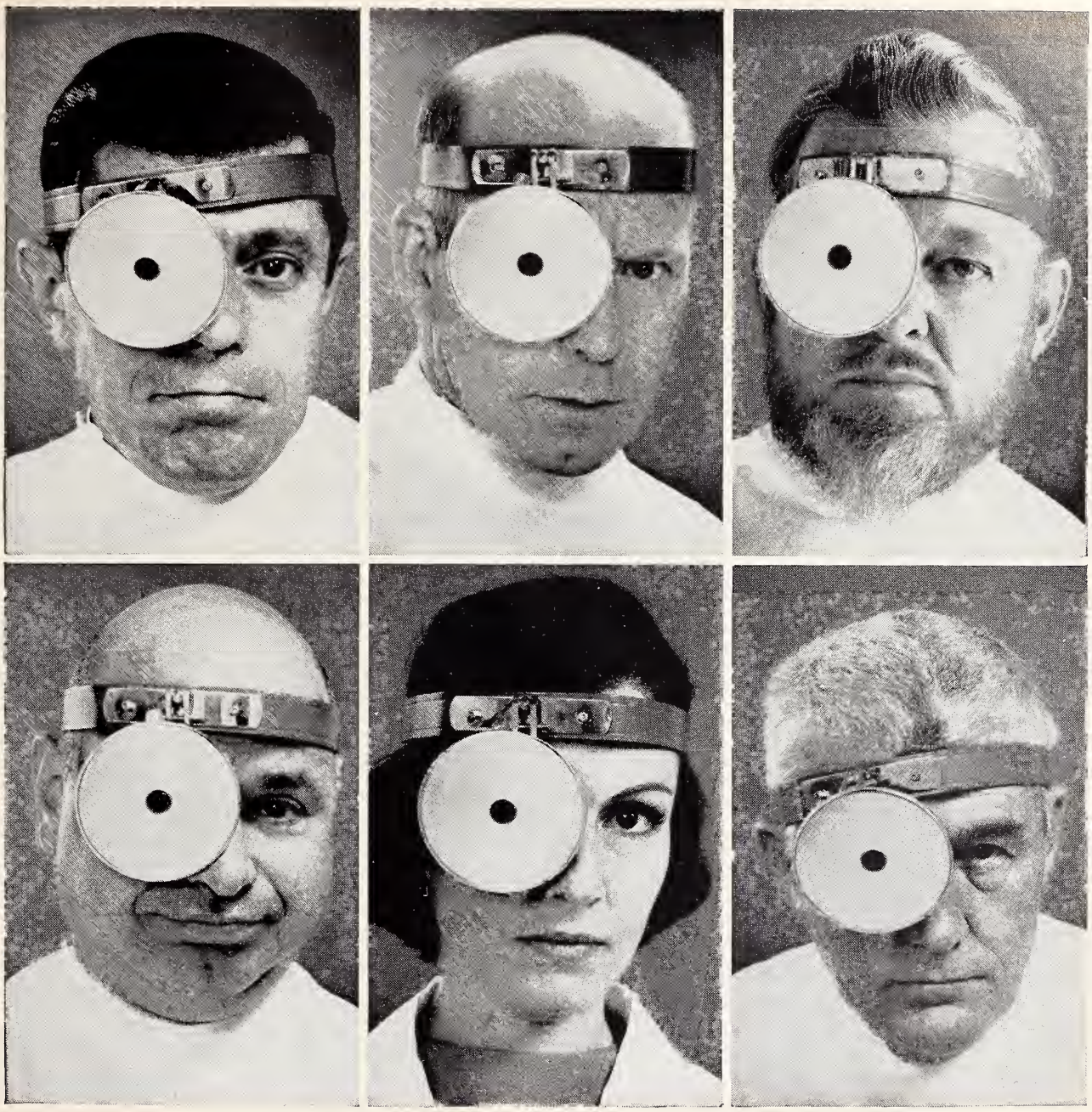
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"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

Wrong! But that's no more preposterous than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more exacting. In fact, there are at least nine *specific differences* involving moisture content, purity, potency and speed of tablet disintegration, which make the manufacture of Bayer® Aspirin so different.

These Bayer standards result in significant product benefits, including gentleness to the stomach and product stability, that enable Bayer Aspirin tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.





Letters

to the editor

Dear Doctor Ramsey:

The recent and forthcoming legislative changes have had a profound influence on the practice of medicine and have necessitated closer communications among physicians on a local level. Medicare with its attendant regulations, and the advent of Title XIX on January 1, 1967, make it mandatory for every physician to be aware of regulations and requirements imposed by these programs. We at Wyeth recognize that much of the dissemination of these new guidelines for medical practice is accomplished through the state medical journal. Besides being an effective medium for communication to physicians, it is also well known that the state medical journal plays a vital role in postgraduate medical education of the practicing physician.

Recognizing these two vital functions of the state medical journal, we at Wyeth for the first time have planned, on a trial basis, to utilize these journals in our promotional efforts. Because both the aspect of medical communications and continuing medical education are so important, we feel that anything we can do to support your state medical journal will in essence be of service to the practicing physician in your state. We are pleased that we will be a regular advertiser in your publication during 1967 and hope that your society and the physician members as well as Wyeth can benefit from this project.

In order to get to know you better and to have you and your organization know Wyeth better we hope that during the course of the coming year one of our management group together with our local sales manager can get together with you, the executive secretary and the president of the medical society at a luncheon meeting for discussion of problems of mutual interest. At such a time when we plan

Continued

Tandearil®

oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

Geigy Pharmaceuticals
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Ardsley, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic joints move again



3 out of 4 osteoarthritics completely or markedly improved

Please see adjoining page for brief prescribing summary.

TA-4919 PC

Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964. — 76.9% of 407 patients

Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966. — 84.6% of 39 patients

LETTERS

Continued

to visit your area, I will contact you with regards to the possibility of arranging such a luncheon.

By participating in advertising support of your official state journal, we at Wyeth hope that we can contribute to both the educational and communication needs of the practicing physician in your state.

Sincerely,
(Signed) Robert S. Warner, M.D.
Director of Professional
Marketing Services
Wyeth Laboratories

February 2, 1967

Dear Doctor Ramsey:

Wanted—part-time or full-time positions for retired physicians.

At its meeting in Las Vegas, November 1966, the House of Delegates adopted the following resolution:

"Resolved, That the American Medical Association take measures to insure the attention of medical societies to the need for appropriate utilization of retired physicians and inactive nurses."

AMA's Physicians' Placement Service is presently considering the development of a special service within its overall existing activities to implement the intent of this resolution. A rough estimate indicates there are approximately 2,600 women physicians not practicing and 8,500 other physicians who have retired.

Many retired or non-practicing M.D.'s have found employment on a part-time basis with life insurance companies, in V. A. hospitals, in emergency rooms, as consultants at public hospitals and agencies, with voluntary health agency programs, in developing community health centers (of all kinds), as school health physicians, and even in some private practice situations.

The placement service wants to develop (1) a roster of available opportunities for full or part-time physician employment, and (2) a list of physicians interested in returning to limited practice or service. We encourage you to survey the opportunities and interested physicians in your state or county, either formally or informally, and to transmit to our Physicians Placement Service information to promote this new project.

(Signed) F. J. L. Blasingame, M.D.
Executive Vice President,
American Medical Association

Retail Prescription Drug Prices DOWN

IN connection with President Johnson's Economic Message to Congress, the president of the Pharmaceutical Manufacturers Association, C. Joseph Stetler, recently made the following statement:

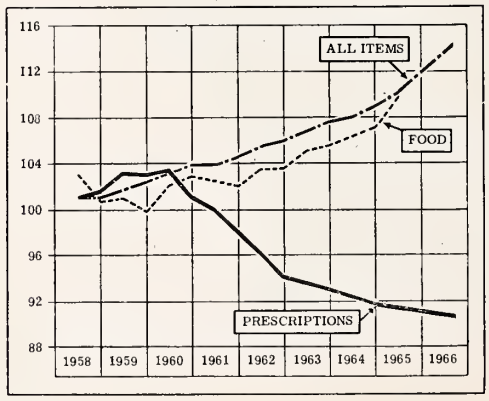
"For the second year in a row, the Council of Economic Advisers, in reports accompanying the President's Economic Message to Congress, has pointed out that the trend of prescription drug prices has helped hold down medical care and general living costs.

"Today's report, in addition to disclosing that 'prices of drugs and medicines have not risen in recent years,' also states that 'new drugs and medical practices, which shorten hospital stays, have partly offset the increases in costs per hospital day' for patients.

"A year ago, the Council said: 'In the most recent five years, medical costs have risen less rapidly than in the 1950's. This has been due primarily to the fact that prices of prescription drugs have been declining.'

"Drug prices are unquestionably an unwanted burden for families where illness and financial difficulties coincide. For this reason we are proud of the record of pharmaceutical manufacturers, and indeed of wholesalers and pharmacies which are part of the distribution chain, in providing a performance record almost without parallel in an inflationary period.

"The Consumer Price Index for the third quarter of 1966, the latest available, shows 'all items' at 114.1, compared with prescription drugs at 90.8. The index is based on a 1957-59 base period of 100." The chart illustrates the trend of prices in three important categories since 1957-59. ◄



CONSUMERS are paying consistently lower prices for prescription drugs, while the cost of living generally continues to rise, U. S. government figures show. A comparison of retail drug prices with the prices of food and with all commodities for the past seven years shows that drug prices began to drop in 1960 and have continued downward ever since, reaching new lows in 1965. Other prices have followed a upward trend over the same period. (Source: U.S. Bureau of Labor Statistics, Consumer Price Index. Base, 1957-59=100.)

A Building Block approach to treating hypertension

With these three therapeutic building blocks you can create a once-a-day regimen to fit almost any degree of hypertension. See the following pages for details . . .



Consider starting your hypertensives on this basic thiazide

ABBOTT

Enduron eliminates sodium around the clock, yet is relatively sparing of potassium

Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect — with little reduction in intensity during the first 12 hours, and decline thereafter only gradual.

Potassium loss, in contrast, reaches an early minor peak. Then it subsides rapidly. Moreover, doses larger than 5 mg. have little added effect on potassium. Thus doubling the dose from 5 to 10 mg. approximately doubles sodium excretion—yet increases potassium loss little or none.

Use Enduron once a day as an ideal starting therapy in mild hypertension. Use it, too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON®
METHYCLOTHIAZIDE



DAILY DOSAGE RANGE	Minimum	Usual	Intermediate	Maximum
	2.5 mg. tablet	5 mg. tablet	7.5 mg.	10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl

The deserpidine component compares favorably to reserpine, but with reduced side effects

The rauwolfia component of Enduronyl is deserpidine (Harmonyl®), a purified crystalline alkaloid. It is comparable to reserpine in its antihypertensive and tranquilizing activity. Yet it produces less tendency toward typical rauwolfia side effects such as drowsiness, lethargy, stuffy nose, depression, etc.

Patient acceptance has been excellent.

Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most needed: in the deserpidine. These scored tablets give a surprisingly flexible choice of doses (see below).

Use Enduronyl for your patients within the broad range of mild to moderate hypertension. Dosage is *once* a day: this means Enduronyl will generally cost patients less than equivalent drugs taken two or three times daily.

Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.



	Minimum	Usual	Intermediate	Maximum
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DAILY DOSAGE RANGE	2.5 mg. methyclothiazide 0.25 mg. deserpidine	5 mg. methyclothiazide 0.5 mg. deserpidine	7.5 mg. methyclothiazide 0.75 mg. deserpidine	10 mg. methyclothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

Eutonyl affords a different kind of basic therapy for moderate to severe cases

Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance, with little or no effect upon cardiac output.[1,2]

In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied — including some unusually difficult cases. Eutonyl lowers diastolic in proportion to systolic, and in half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

Most important: There is no central depressant action. In fact, many patients reported an *increased* sense of well being.

Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®
PARGYLINE HYDROCHLORIDE



DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
	10 mg. tablet	25 mg. tablet	50 mg. tablet or as needed	200 mg.

1. Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.
2. Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects

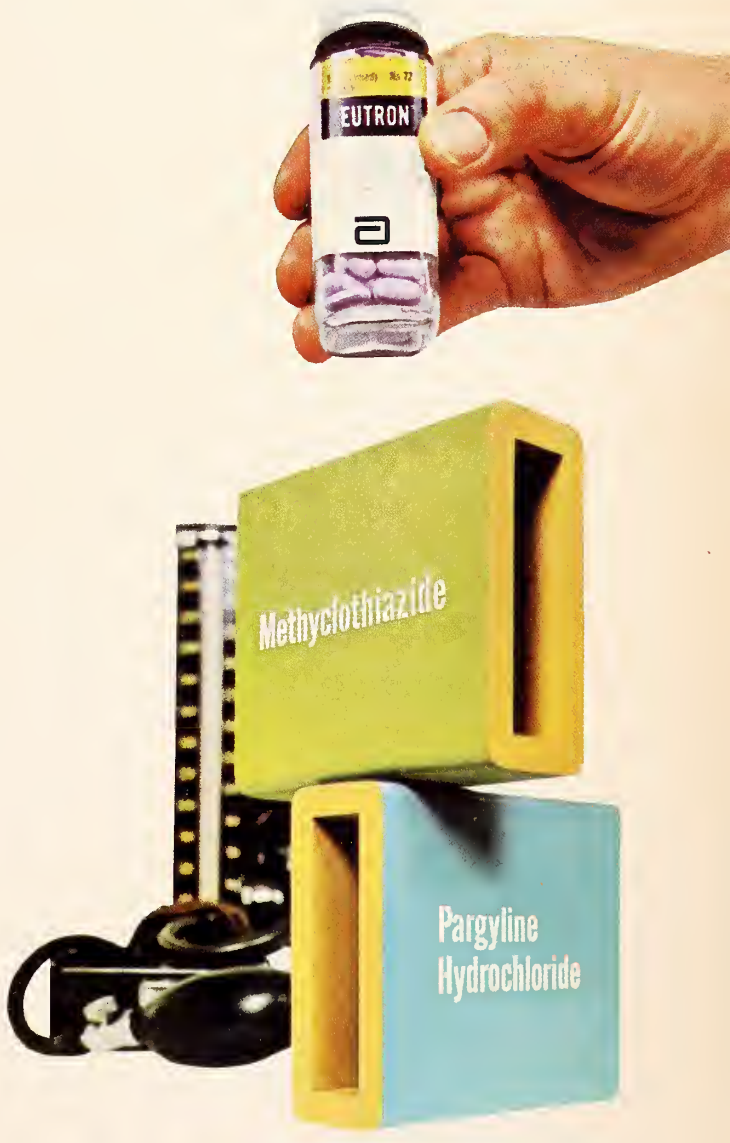
Only a 7/4 mm. span between standing and recumbent pressures—reduced chance of orthastatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

Indeed, fully 94.5% of all patients studied during clinical trials continued on therapy uninterrupted by side effects.

Most striking was the drug's action in lowering blood pressure to *nearly equal levels in all body positions.* Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, with reduced likelihood of orthostatic effects. And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.



Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYCLOTHIAZIDE 5 MG.

	Minimum	Usual starting	Intermediate	Maximum
DAILY DOSAGE RANGE	12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide	25 mg. pargyline hydrochloride and 5 mg. methyclothiazide	37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide	50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

704075

ENDURON®

METHYCLOTHIAZIDE

ENDURONYL®

Each tablet contains Methyclothiazide 5 mg.
with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild hypertension. Also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shutdown; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Enduronyl is contraindicated in severe mental depression, active peptic ulcer, and ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions and Adverse Reactions: Use thiazides with caution in severe renal dysfunction. Caution is also necessary with impaired hepatic function or progressive liver disease. During intensive or prolonged thiazide therapy, watch chloride and potassium levels (especially the latter if patient is on digitalis). In surgical patients, thiazides may alter response to vasopressors and tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborn). Occasional thiazide side effects also include blood dyscrasias; elevations of BUN, serum uric acid, or blood sugar; electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfias may increase hypotensive effects of surgery or anesthesia, and are best discontinued two weeks prior. They also lower the convulsive threshold in epilepsy. Other possible rauwolfia side effects include drowsiness, nasal stuffiness, nausea, weight gain, and diarrhea. Less frequent complications of deserpidine therapy are aggravation of peptic ulcer, epistaxis, and skin eruption. Alcohol, barbiturates or narcotics may potentiate action of deserpidine.

EUTONYL®

PARGYLINE HYDROCHLORIDE

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.

Contraindications: Pheochromocytoma, advanced renal disease, paranoid schizophrenia and hyperthyroidism. Until further experience is gained, not recommended for use in patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. Interval of two weeks should separate therapy and use of these agents.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When necessary to administer alcohol, narcotics (meperidine should be avoided), antihistamines, anesthetics, barbiturates, chloral hydrate and other hypnotics, sedatives, tranquilizers, or caffeine, these can be used cautiously at a dosage of ¼ to 1/5 the usual amount. Adjust dose of anesthetic agents to response of patient. Avoid parenteral administration where possible. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or other evidence of coronary disease should not increase physical activity. Pargyline may lower blood sugar. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver dysfunction or progressive liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields, and fundi.

During intensive or prolonged methyclothiazide therapy, watch chloride and potassium levels (especially latter if patient is on digitalis). Methyclothiazide also may reduce arterial response to pressor amines. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborns). Thiazide drugs may increase responsiveness to tubocurarine.

Side Effects: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Drug fever is extremely rare. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Thiazide side effects also include blood dyscrasias, elevation of BUN, serum uric acid, or blood sugar, electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout. Nocturia has been observed with the combination.

ABBOTT

704075

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3.	Daniel H. Cannon, New Albany	Elmer L. Wallace, New Albany	New Albany, May 17, 1967
4.	Harold W. Richmond, Columbus	David L. Adler, Columbus	Columbus, May 17, 1967
5.	John Ellett, Jr., Coatesville	Richard Veach, Bainbridge	Greencastle, May 17, 1967
6.	J. J. Farrell, Jr., Greenfield	Stephen D. Smith, Knightstown	
7.	Jay Reese, Martinsville	James H. Gosman, Indianapolis	
8.	Donald E. Spahr, Portland	Joseph F. Vormohr, Portland	Portland, June 7, 1967
9.	Harry T. Stout, Frankfort	Earl K. Williams, Frankfort	May 18, 1967
10.	R. James Bills, Gary	John J. Reed, Hobart	Whiting, May 3, 1967
11.	Joseph Bean, Logansport	Fred Poehler, LaFountain	Logansport, Sept. 13, 1967
12.	Warren L. Niccum, Columbia City	Kenneth F. Isenogle, Fort Wayne	Fort Wayne, May 17, 1967
13.	Gordon Cook, South Bend	John Hildebrand, South Bend	

INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

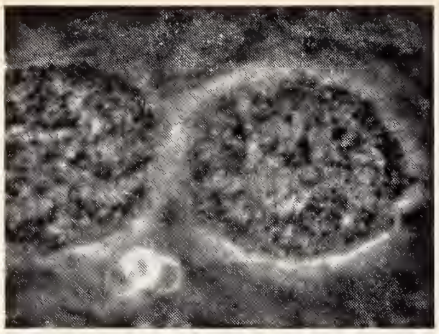


Visual evidence of how corticosteroids influence the inflammatory reaction

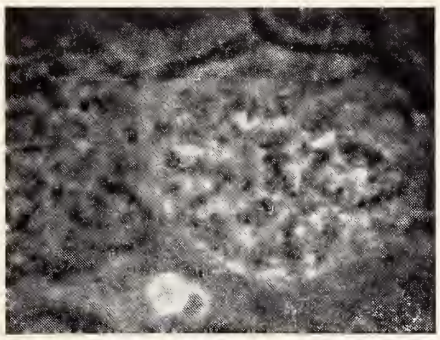
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



Phase-contrast microscopy showing mast cell before injury.



Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

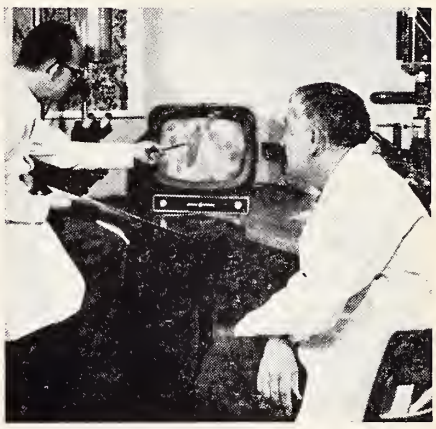
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



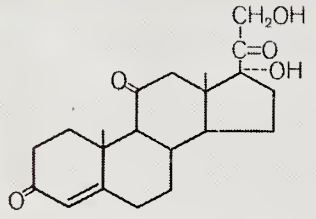
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

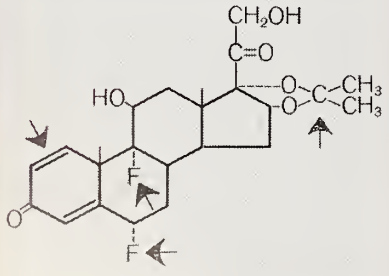
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

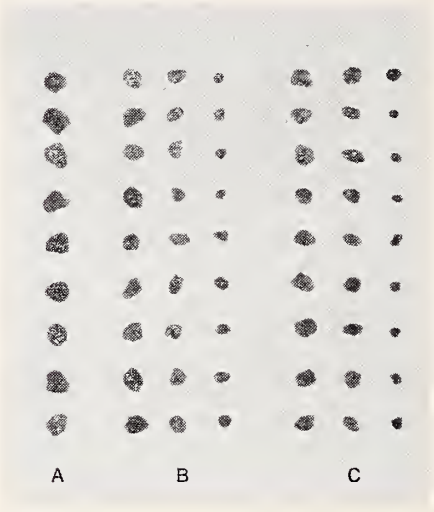


Fluocinolone Acetonide (Synalar)

- *a double bond between carbons 1 and 2*
- *fluorine substitutions at both the 6-α, and the 9-α positions*
- *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

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Carroll	Don J. Wagoner, Delphi	Robert Seese, 101 W. North St., Delphi
Cass	Russell A. Eckert, Logansport	Edward L. TerBush, 216 Ninth Street, Logansport
Clark	Clemente Oca, Jeffersonville	Robert Witt, 201 E. Market St., Jeffersonville
Clay	J. Frank Maurer, Brazil	Forrest R. Buell, 314 Lankford St., Clay City
Clinton	Fred W. Flora, Frankfort	George K. Hammersley, 361 E. Clinton St Frankfort
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Dearborn-Ohio	Alfred K. Rhodes, Lawrenceburg	J. Kenneth Jackson, 223 Mechanic St., Aurora
Decatur	Robert P. Acher, Greensburg	James C. Miller, 207 N. Franklin St., Greensbur
DeKalb	John H. Hines, Auburn	Ben R. Graber, Waterloo
Delaware-Blackford	John R. Stanley, Muncie	Jack M. Walker, 412 White River Blvd., Muncie
Dubois	Francis H. Gootee, Jasper	Herbert Erhart, 521 Fourth St., Huntingburg
Elkhart	T. D. Arlook, Elkhart	Page E. Spray, 320 W. High St., Elkhart
Fayette-Franklin	Perry Seal, Brookville	J. L. Steinem, 818 Grand Ave., Connersville
Floyd	William E. Garner, Jr., New Albany	Daniel H. Cannon, 1201 E. Spring St., New Alban
Fountain-Warren	Lowell R. Stephens, Covington	Jack D. Furr, Kingman
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Grant	Richard E. Lahr, Marion	Robert G. Young, 1207 Northwood Ct., Marion
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Johnson	George Brown, Greenwood	Merrill M. Wesemann, 251 E. Jefferson St. Franklin
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Kosciusko	Robert D. Dormire, Warsaw	Roland Snider, 604 E. Winona Ave., Warsaw
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Help our heavyweight population eat less.

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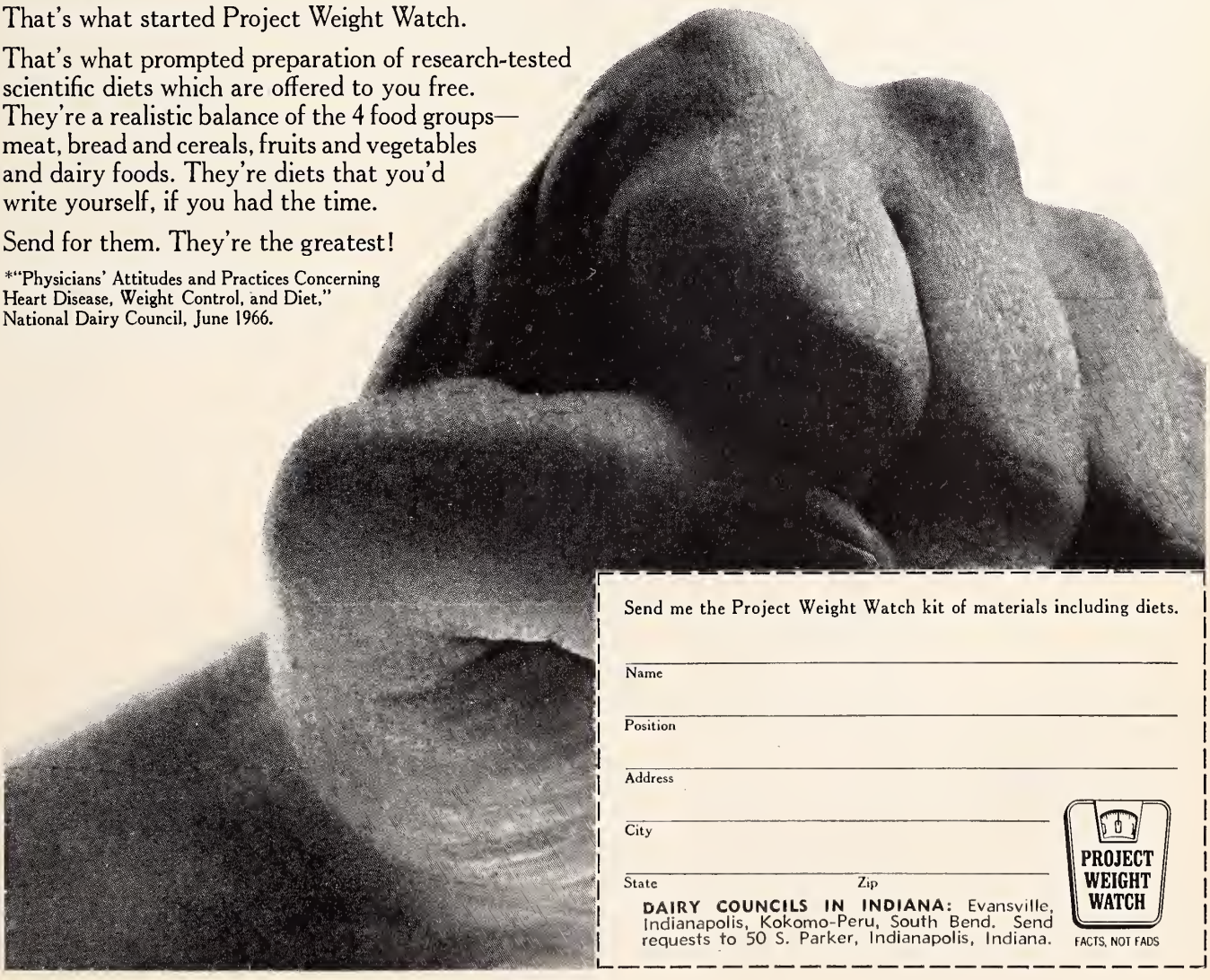
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That's what started Project Weight Watch.

That's what prompted preparation of research-tested scientific diets which are offered to you free. They're a realistic balance of the 4 food groups—meat, bread and cereals, fruits and vegetables and dairy foods. They're diets that you'd write yourself, if you had the time.

Send for them. They're the greatest!

*"Physicians' Attitudes and Practices Concerning Heart Disease, Weight Control, and Diet," National Dairy Council, June 1966.



Send me the Project Weight Watch kit of materials including diets.

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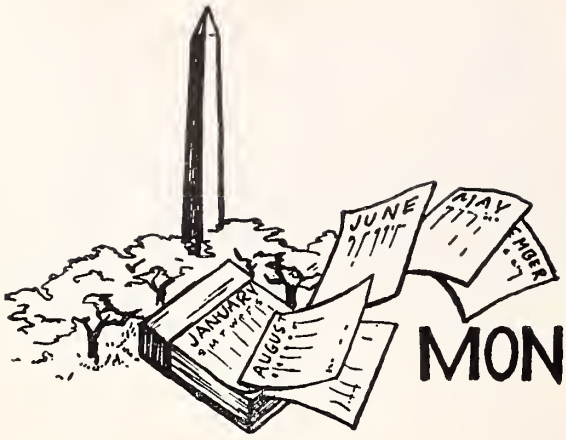
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PROJECT WEIGHT WATCH

FACTS, NOT FADS



This summary of what is happening in Washington is prepared by AMA's Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—The Department of Health, Education and Welfare stated in a special report that both hospital charges and physicians' fees increased sharply last year.

A CONTINUED increase in health care costs was predicted in the report ordered last August by President Johnson.

DRUGS were not a significant factor in the recent accelerated increase in health care prices, the report said. But it added that "drug prices are higher than they would be if there were more vigorous competition at either the manufacturing or drugstore level."

AS FOR THE two major components in the Medical Care Index, the report said:

—Physicians' fees, which had been rising about three percent a year in 1960-65, went up 7.8% in 1966—the biggest annual increase since 1927.

—Hospital daily charges, rising about six percent a year between 1960 and 1965, went up 16.5% in 1966—the largest annual increase in 18 years.

THE INCREASE in doctor fees was attributed to a combination of basic factors: more people are seeking doctors' services more often and the number of active physicians is increasing relatively slowly. The study found no evidence that Medicare, which went into effect last July 1, was a major factor in the rise in doctors' fees.

THE INCREASE in hospital charges was attributed largely to rising wages, which account for two-thirds of hospital costs, and increases in the price of things hospitals buy. The wage rise has not been offset by increased productivity, the report said, and rising standards of care in hospitals have required more expensive equipment and facilities.

MEANTIME, Robert J. Myers, the Social Security Administration's chief actuary, told the House Ways & Means Committee that hospital costs had risen much faster than the administration anticipated since the Medicare plan went into effect. If they continue their upward spiral, the costs will eat away the safety margin included under the Medicare financing plan, Myers said.

Continued on page 409



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Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

In sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or overstimulation. Its key to success? The Dimetapp formula—Dimetane (brompheniramine maleate), a potent antihistamine reported in one study to have elicited side effects as few as the placebo,* teamed with decongestants phenylephrine and phenylpropanolamine—in a dependable 10- to 12-hour form.

Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

Dosage: 1 Extentab morning and evening, or as needed.

Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage. See package insert for further details.

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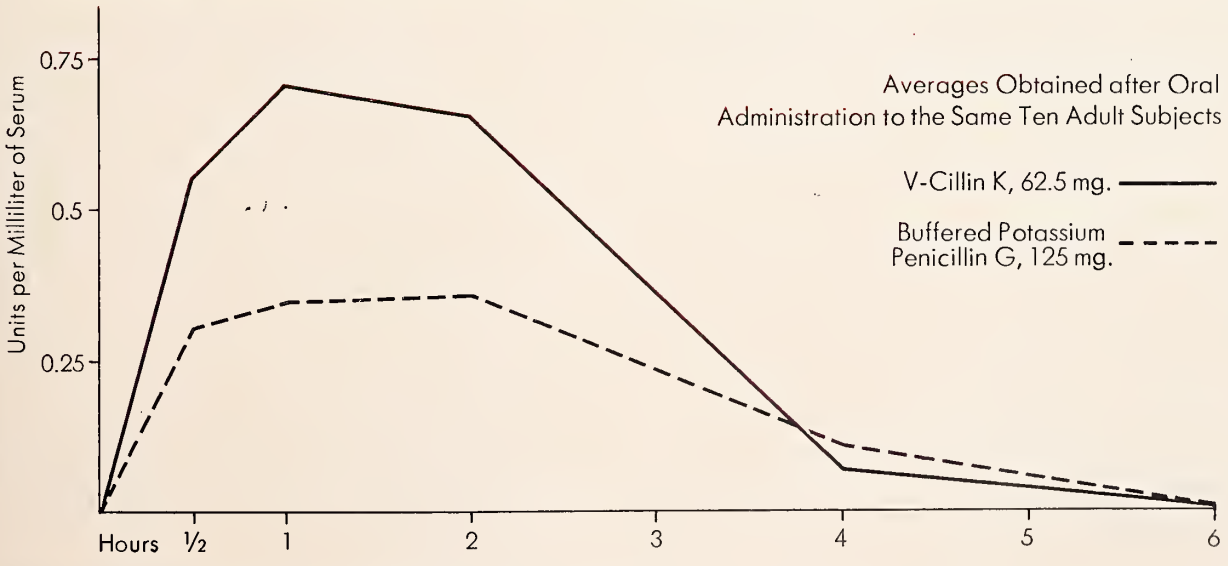
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because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269 1019, 1963.

with high blood levels, even in the presence of food



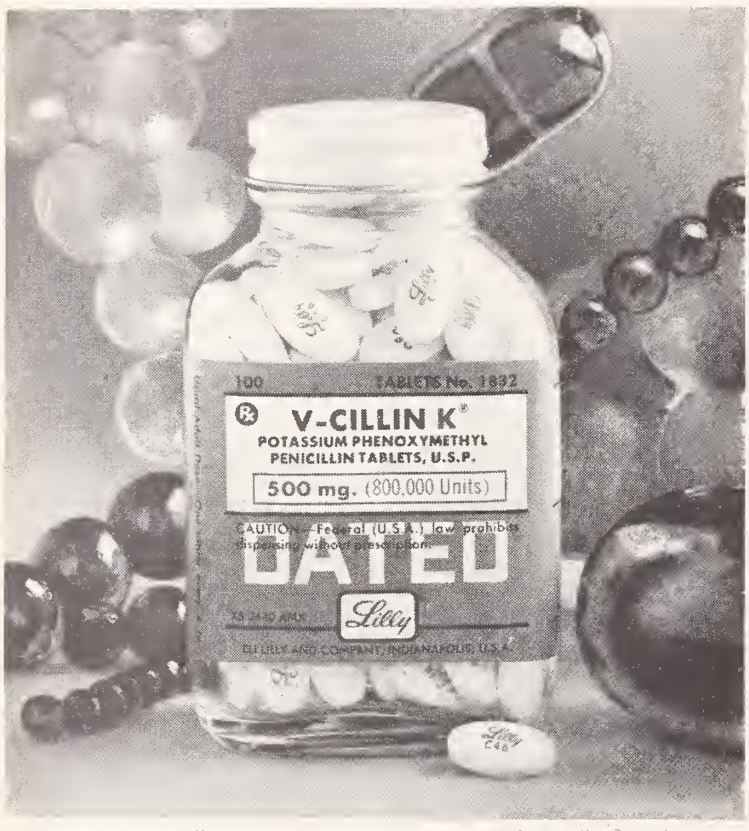
Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

V-Cillin K® Lilly 700157

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. If hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the overgrowth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

7001

Continued

THE HEW REPORT held out little hope for an early end to medical price increases. However, it recommended a series of actions "to slow down these increases and to promote the efficient use of medical care resources."

RECOMMENDATIONS in the report included:

—Comprehensive community health care systems should be developed, demonstrated and evaluated.

—Group practice, especially prepaid group practice, should be encouraged.

—Private and public health insurance plans should be broadened to include more alternative types of medical care.

—States should move quickly to establish and support strong health planning agencies at the state and local levels.

—Cost-reducing methods of reorganizing the delivery of services in hospitals and other providers of health services should be developed, demonstrated and implemented.

—Federally-supported health care programs should be used to train physician assistants, evaluate their performance and disseminate the results.

—Federal funds available under the Health Professions Educational Assistance Amendments of 1965 should be used to support and encourage innovations in health professions' education and training which promote the efficient practice of medicine.

—HEW should undertake an intensive examination of frequently prescribed drugs to assess the therapeutic effectiveness of brand name products and their supposed generic equivalents.

—The Food and Drug Administration should provide doctors with authoritative information of the efficacy and side-effects of all drugs.

—The HEW should call a national conference of leaders of the medical community and public representatives to discuss ways to improve the quality and efficiency of medical care delivery.

TO CARRY OUT the recommendations in the report and allied directives from Johnson, HEW Secretary John W. Gardner said he would take a number of actions, including establishment of a National Center for Health Services Research and Development and calling of a national conference on medical care costs.

AMA CONTENDS THERE IS NO NEED FOR DISPENSING LAW

THE American Medical Association contends there is not sufficient justification for a federal law that would ban dispensing of drugs and devices, such as eyeglasses, by physicians.

DR. JAMES Z. APPEL, immediate past-president of the AMA, outlined the AMA position in testimony before the Senate Antitrust and Monopoly Subcommittee which held hearings on such legislation (S. 260) introduced by its chairman, Sen. Philip A. Hart (D., Mich.).

THE LEGISLATION appeared to stand little chance of being approved by Congress, at

least this year. Hart has unsuccessfully pushed similar legislation for the past few years.

THE AMA believes that "federal legislation cannot be justified unless there is a compelling need," Appel testified. In this case he said, "such a need does not exist."

"ORGANIZED MEDICINE looks upon dispensing as neither immoral nor unethical in and of itself," the AMA official said. "Organized medicine believes — and the medical practice laws of the states confirm — that dispensing drugs and devices is a privilege granted to physicians in order that they may best serve the public interest.

". . . AMERICAN MEDICINE condemns any abuse of privilege. But the bill under consideration would withdraw the privilege entirely, regardless of its benefits for the many, because it is abused by the insignificant few." ◄

About Our Cover

The reclining figure on this month's cover, in a reflective attitude, symbolizes the human suffering and sorrow brought about by cancer and acknowledges April as Cancer Control Month. The axioms of cancer detection and cancer control which are the basis for the public education campaign of the Indiana Division of the American Cancer Society* form the background.

The Cancer Society has been very active in Indiana and each year improves upon its educational and diagnostic program. Its constructive efforts in assisting hospitals in cancer detection activities, in assisting physicians in their public education efforts and in helping to make "Every Doctor's Office A Cancer Detection Center" are complemented by its own public information service which seeks to instruct and remind people that the early detection of cancer is necessary before the advances in cancer treatment can be applied.

An arsenal of tools and ideas is being marshalled by the Society to get the job done in an orderly and effective way.

The American Cancer Society's program is in theory and in practice an investment in the future through a balanced attack in those areas where the most productive, long-term benefits in cancer control can be obtained. It is not a program emphasizing aid after illness has occurred, but one attempting to develop new tools and new knowledge and one that seeks to inform and motivate preventive action.

The Society has invested well over $1,500,000 in cancer research in Indiana since 1958. "The Cancer You View" series, which begins in this issue of *The Journal,* is just one element of the Society's cooperative program with the medical profession. Plans are under way to widely circulate 12 new professional films, five of which are now available.

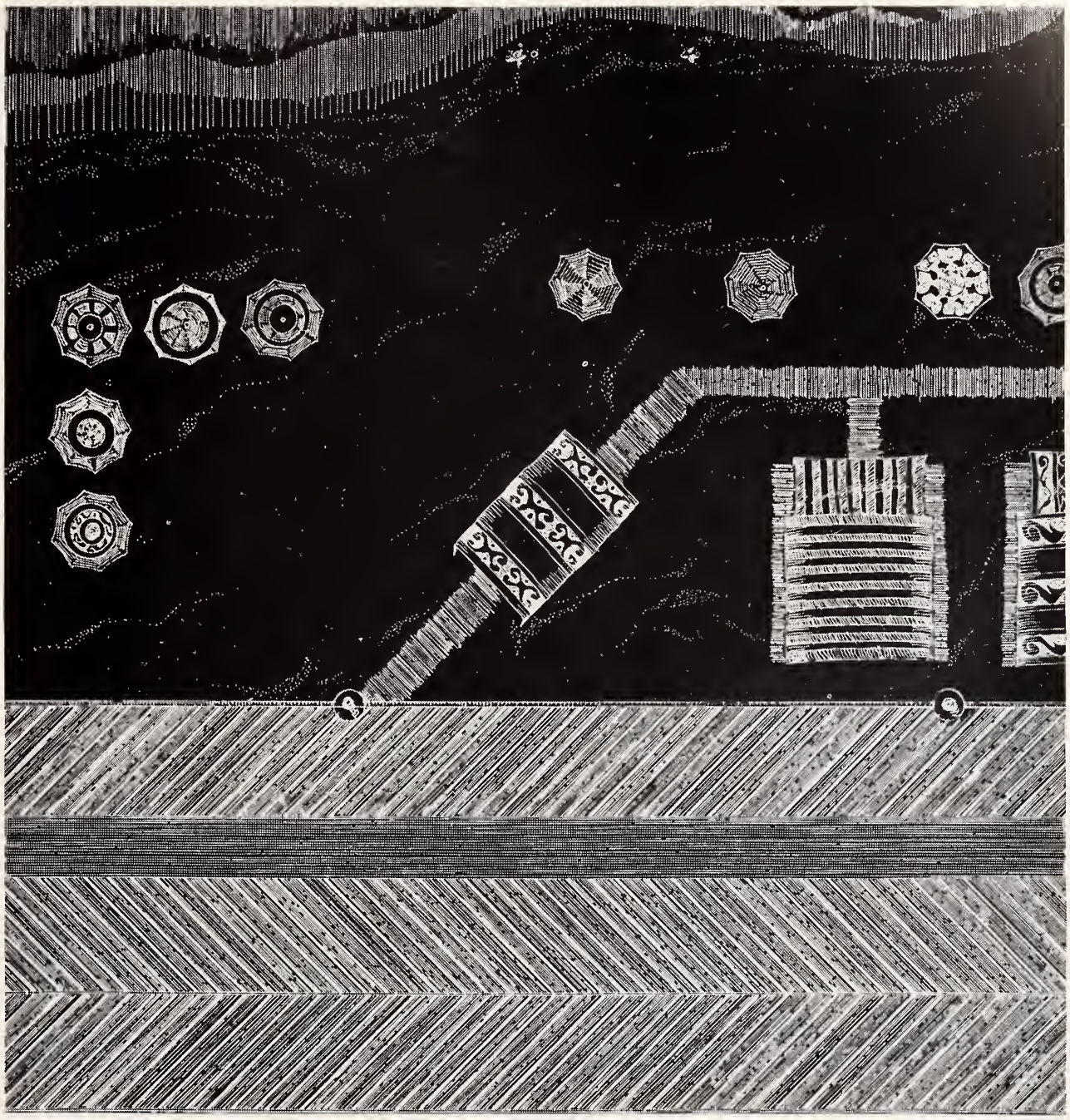
"Road Show" teams on special sites and a professional speakers bureau are being organized to make available the latest in cancer detection, diagnosis and treatment through county medical society, hospital staff and other meetings.

In addition, plans are underway to back up the research and professional education with a broader public education program in all parts of Indiana. In terms of attaining immediate results in improving cancer mortality rates, this program offers the medical profession an able ally in helping get patients to treatment earlier.

This is a very healthy situation. Means are being provided for the citizens of Indiana to effectively help themselves in the war on cancer.

Our thanks to the Cancer Society, Craig G. Gosling, medical artist and McKinley Leapley, R.B.P., medical photographer, for the inspiration, art work and layout of this month's cover. The figure pictured is Michelangelo's "Night" from the tomb of the Medici in Florence.

* The 1966 annual report of the Indiana Division of the American Cancer Society is available now from the Cancer Society unit of each county or from the publication office of The Journal. It is informative reading.



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Come to Atlantic City—one of America's favorite by-the-sea playgrounds—and join your colleagues at the AMA's 116th ANNUAL CONVENTION!

Fine hotels and motels, excellent restaurants, plus all the advantages of a lively resort make this year's Convention a must for you and your family. Atlantic City provides a superb setting for a summer classroom and all the latest techniques of modern medicine. Plan to be one of the participants in this rewarding four day postgraduate education program.

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RESERVE NOW for the SCIENTIFIC AWARDS DINNER in honor of the Scientific Award Winners—Wednesday, June 21, 1967. Since space is limited, we suggest you make your reservations before June 1, 1967. Tickets are $10.00 each, payable in advance.

See JAMA May 8, 1967 for complete scientific program—forms for advance registration and hotel accommodations.

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This extended formula, completely compatible with the infant, has demonstrated its advantages over older modified-milk formulas in intensive clinical tests.[1-4]

It provides:

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New Optimil's marked superiority in achieving satiety–reflected by infants' infrequent crying—is most reassuring to mothers.

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New Optimil's superior nutritional balance of major nutrients and their components provides highest caloric efficiency. Optimum protein and mineral content assures lowest renal solute load.

Optimil is recommended as regular feeding for optimum growth and development of normal newborns; as an ideal supplement to or replacement for breast milk; as sound nutrition for prematures; and as prophylaxis against both essential fatty acid and nutritional iron deficiency.

Optimil, diluted 1 to 1 with water, provides a standard feeding formula—20 calories per oz. Supplied in new, convenient 16-oz. cans, Optimil is available for your specification at leading drug stores.



The complete Optimil system available to hospitals includes: 5% Glucose Water in presterilized 4-oz. disposable bottles • Optimil 13 calories/oz. Prepared Formula in 4-oz. disposable bottles* • Optimil 20 calories/oz. Prepared Formula in 4-oz. disposable bottles* • Optimil Concentrated Infant Formula in 16-oz. cans • Sterilized disposable nipples • Optimil Gift Pack: six 4-oz. disposable bottles of Optimil 20 calories/oz. Prepared Formula* and one 16-oz. can of Optimil Concentrated Infant Formula.

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1. Carson, M., and Hart, L.: "New Perspectives on Nutritional Aspects of Modified Milk-Fat Formulas," Colloquim held under the auspices of The Pediatric Department, Western Reserve University School of Medicine at Cleveland, Ohio, Sept. 8, 1966. Data available on request.

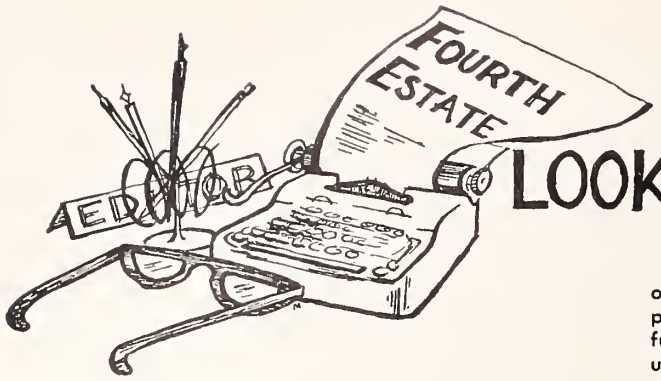
2. Hepner, R.: ibid. 3. Nichols, M.: ibid. 4. McCann, M.L.; Teree, T., and Wallace, W.; ibid.

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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appeor on the editoriol pages of the public press, and which ore of interest to the medicol profession. Its function is to review comments which may be favorable or unfovoroble to medicine. Members ore invited to submit editoriol clippings for this column.

Blue Ribbon

It is no surprise that the Indiana House of Representatives found itself unable to choose a site for a new state medical school. It is nonetheless a bitter disappointment.

Quite clearly, the House voted according to regional interest, which is the way everyone expected it to vote. The medical school is a ripe prize, and no legislator could have faced his constituents if he had voted to put it in some other area.

But the process had to be gone through — the maneuvering, the coalitions, the voting — if only to prove to everybody that the General Assembly cannot be the body that chooses a site for the medical center. And never will be.

To wait and go through the procedure again in 1969 would be folly. It would delay a badly needed institution for two more years — and longer, because the voting result in 1969 would unquestionably be the same as the voting result in 1967.

The only responsible thing left to do is to create a "blue ribbon" committee of impartial, out-of-state experts and empower that committee to select the site on the basis of merit.

We are so confident of the overwhelming merit of South Bend's case that we have no hesitation in urging that the choice be turned over to the experts. Any community which balks at such a solution, it seems to us, is admitting that it never belonged in the race.

In both houses of the Assembly, bills exist to implement the blue-ribbon committee approach to a new medical school.

Our state needs that school urgently. We hope the Assemblymen will now empower the experts to do what they could not do.—*South Bend Tribune*, Feb. 25, 1967.

Many Stars Remain

Despite the "inevitability" of a totally artificial heart for humans, finding the causes, prevention and cures for the major cardiovascular disorders that affect at least 22 million people remains the goal of the American Heart Association, according to its president, Dr. Lewis E. January.

"We have been reaching for stars," he says, "and we've touched a few." Among recent fruits of AHA-supported research, he cites:

New drugs for lowering high blood pressure; vastly improved diagnostic techniques; heart-lung machines to take over circulation during operations; advances in surgery for heart disease; drugs to safeguard against repeated heart attacks, and closed-chest heart massage, which was unheard of a few years ago.

Many stars remain to be reached for. —*Anderson Bulletin*, Feb. 25, 1967.

Medical Training Plans Delayed

Inability of the 1967 Indiana General Assembly to agree as to provision for urgently-needed new medical education facilities is a regrettable setback.

The proposed second medical school was blocked, since none of three groups — backing proposed sites at Muncie-South Bend, Terre Haute, and Gary-Evansville — was able to muster enough votes for itself.

The whole state will be the loser by this triumph of sectional interests over the general interest, since the whole state needs more doctors as soon as possible. And it takes a number of years to produce new M.D.'s even from the moment the site is decided.

We in northern Indiana thought our case was pre-eminent for numerous reasons, especially the big surge of population expected in our region.

But since agreement this session was not to be, we must hope now for success of the alternative being prepared by the legislature — creation of an Indiana Medical Education Authority to determine the best plan.

This new authority is to be composed of six Hoosiers, appointed on a geographical basis, and five nonresidents.

Certainly the new authority should be well-qualified to render a capable, unbiased decision. Its state members are to include two physicians. The nonresidents will include a dean of a medical school and five physicians representing specified professional medical organizations.

The new authority as contemplated is to have broad powers to decide which type of program will keep new medical school graduates and physicians in Indiana; it could decide on another medical school, expanded internships and residencies or any combination of plans.

The task of providing for Indiana's medical care needs is tremendous, and getting bigger. Let's get on with it.—*The Elkhart Truth*, March 2, 1967.

A Record of Service

A lot of people seem to believe that before medicare we lived by the law of the jungle. A little lesson in history will help place recent Congressional innovations in more accurate perspective. In 1847, formalized medical education was practically nonexistent. Men actually bought medical degrees for a little cash. Many who hung up shingles had no medical training. Medical quackery was rampant. There was no recognized code of ethics for physicians.

In 1847, 250 physicians met in the Academy of Natural Sciences in Philadelphia and founded the American Medical Association. Thus began a crusade for better medical care. Today, the association's membership includes more than 206,000 physicians.

The AMA carries on a continuing program to promote the art and science of medicine and the betterment of public health. Its activities are so widespread they defy adequate description in a limited space. It sponsors more than 1,000 meetings a year. Its clinical conventions are the most important postgraduate medical study sessions in the world. These meetings encompass some 400 scientific lectures; between 350 and 400 scientific exhibits; 300 to 400 industrial exhibits illustrating new drugs, equipment and books; outstanding medical motion pictures and special color television presentations.

The AMA records department keeps complete records on all licensed physicians beginning from the time a student enters medical school. Most of the laws on the statute books today having to do with health and medicine are based on proposals and recommendations of the medical profession through its spokesman, the AMA. The association has been described as the guardian of the nation's health — and it most assuredly is.—*Terre Haute Tribune*, Feb. 14, 1967.

The Doctor Drought

The American Medical Association's Council on Medical Education begins its 63rd annual Congress today, a seven-day affair, in Chicago.

Doctors are always in demand and always in short supply. American medical schools graduated 7,574 men and women in 1966, an all-time record, but not enough to fill the need. Probably no nation ever had all the doctors it could use.

The doctor shortage in the United States has become chronic. The American Medical Association estimates that by 1975 some 10,000 medical students will be graduated each year in the nation. But that still won't be enough.

The Journal of the AMA recently stated, flatly: "Despite the high ratio of physicians to the general population and the high quality of medical education and patient care in the United States as compared to that in the world around us, apparently medicine and the public in general are not content that we have achieved all that is possible and desirable."

The AMA has not dragged its feet in facing the doctor shortage. The drought is caused by a shortage of medical facilities and the earlier financial rewards of other sciences. It is also the result of the high cost of medical education. Since March of 1962, the AMA has been underwriting loans for med students, interns and residents. This is on top of considerable federal aid.

Sixteen new med schools are continuing development programs. The new schools are expected to be graduating an additional 1,062 medical students annually by the mid-1970s.

Total enrollment is at a new high in the U.S. medical schools. The figure is 32,835 as against 32,428 in 1965-66. The total of internship and residency positions offered in U.S. hospitals — 54,866 — has increased less than two percent in the past year.

Federal programs have created peculiar troubles for medical schools. Medicare and the government's other rapidly growing programs of health care for the poor are producing the problem of how to teach without "teaching material"—the steady stream of indigent patients who formerly were treated by students.

A reexamination of medical education is perhaps overdue. The schooling of doctors is being faulted on its failure to train doctors in sufficient quantity and quality, as clinicians, professionals and human beings.

A special committee of the faculty of the Harvard Medical School in a report of Oct. 8, 1966, called for sweeping changes in the curriculum and orientation of medical education.

The report called for a core curriculum, much truncated, which would leave the student free to take a widely-varied list of electives. As it is, most medical students take the same course, whether they are to be practitioners, psychoanalysts, surgeons, research scientists or hospital or public health administrators.

In praising the Harvard report, *The New York Times* referred to "The Procrustean bed that is the standard medical school curriculum, with its incredibly heavy and rapidly increasing volume of required factual knowledge." Members of the AMA and others interested in medical education are searching for ways to make the bed more flexible.—*Anderson Herald*, Feb. 10, 1967. ◄

Drugs for This War's Malaria

The development of resistance of an organism to an initially effective drug is a relatively common biological phenomena. This dynamic process too often results in overcriticism of the drugs involved, and a reduction in confidence in their efficiency. It is a case of "the good being damned by the best!"

The answer is the continuing development of antimalarial drugs to keep ahead of the development of resistance to drugs already in use. We must not fight each war's malaria with the last war's preventive drug. — Colonel Spurgeon Neel, MC, USA, in *USAF Medical Service Digest*, (17:8), May, 1966.


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Supervised by THE COUNCIL

Volume 60 — April 1967 — Number 4

Cancer cells differ fundamentally from normal cells in their enzyme systems. The search for anti-cancer substances demands intimate knowledge of enzymology in normal and neoplastic cells. The safe and effective anti-cancer chemical should be able radically to interfere with the enzyme systems of neoplastic cells without harming the enzymatic processes of normal cells.

Towards a Rational Chemotherapy of Cancer

GEORGE WEBER, M.D.
*Indianapolis**

THE vital need for an effective chemotherapy of neoplastic diseases is well-known to the general practitioner and specialist. Clinical statistics show that out of six patients with cancer, only two, or at the most three, are saved by the current treatment by radiation and/or surgery. Unfortunately, for 50% of the cases, there is little hope because of the spread of the disease or the incurable nature of the neoplastic disorder. Since it is not feasible to track down all metastatic sites with surgery and radiation, the need for curative drugs is ever great. There are a number of very useful compounds in the palliative approach, and actinomycin, methotrexate, and other drugs show curative effects in selected cases of choriocarcinomas.



Most of these compounds are toxic in the dose range in which they must be given for effective treatment. Therefore, clinicians and basic scientists have been searching for other types of drugs. The ideal anti-cancer drug is one which will be highly toxic to neoplastic cells and relatively non-toxic to normal cells. This approach requires a more penetrating and extensive knowledge of the biochemical machinery of the cancer cell in comparison to that of normal tissue.

A disease process is understood when the etiology is clarified and the symptoms and signs can be correlated with the progress of the disease. We have applied such concepts at the biochemical level for an understanding of the cancerous cell.[1-10]

Spectrum of Hepatomas

A suitable biological system became available with the production of a spectrum of hepatomas of different growth rates by Dr. H. P. Morris of the National Cancer Institute.[11] The liver tumors were caused by incorporation of chemical carcinogens in the diet and the arising hepatomas were maintained through serial transplantation in rats. The important point is that all these tumors were hepatomas but the various lines exhibited different rates of growth. The great advantage was that the individual tumor lines represented stable lines of neoplastic cells and thus offered transplantability and repeatability.

Molecular Correlation Concept

We assumed that the different growth rates of the various hepatoma lines might be taken as indicative of the progression of the cancerous process.[1-10] We chose the growth rate to characterize these tumors because this can be measured.[7]

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With this concept in mind, we began to study the correlation of molecular "symptoms and signs" with the progress of the cancer. The slow-growing tumor lines were assumed to represent the less malignant cancers; the more rapidly-growing hepatomas the more advanced type of cancer. The most rapidly-growing hepatomas were assumed to represent the full-blown development of the neoplastic condition. The slow-growing hepatomas killed a rat in three to 12 months; the medium growth rate hepatomas required about six weeks, and the rapidly-growing liver tumors, one to three weeks. We investigated systematically the main metabolic pathways and key enzyme systems and their correlation with the growth rate of the tumor lines.

The results indicate that there are progressive alterations in the cancer cells in a number of metabolic pathways which reveal a definite pattern at the molecular level.[1-10]

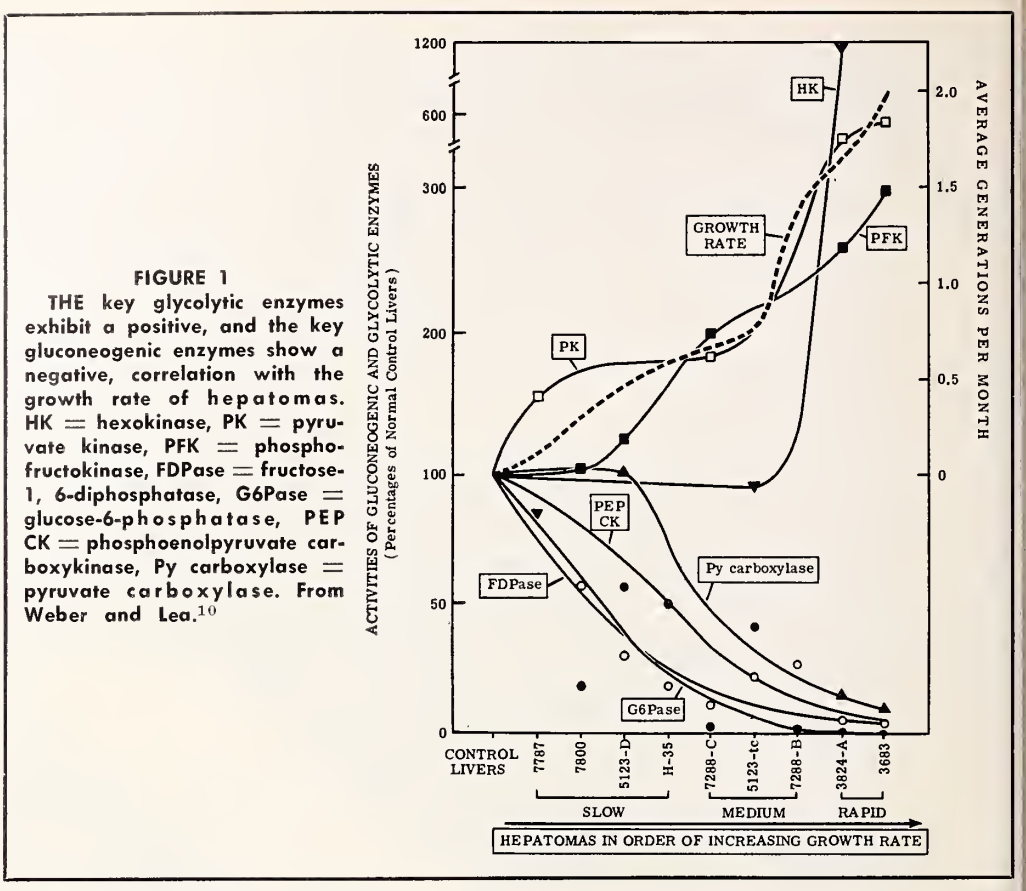


FIGURE 1
THE key glycolytic enzymes exhibit a positive, and the key gluconeogenic enzymes show a negative, correlation with the growth rate of hepatomas. HK = hexokinase, PK = pyruvate kinase, PFK = phosphofructokinase, FDPase = fructose-1, 6-diphosphatase, G6Pase = glucose-6-phosphatase, PEP CK = phosphoenolpyruvate carboxykinase, Py carboxylase = pyruvate carboxylase. From Weber and Lea.[10]

Defects in Metabolism

In a normal liver, the pathways of glycogen deposition and glucose production predominate over the pathways of glycolysis and direct oxidation. In the hepatomas there was a gradual decline of gluconeogenesis and the key gluconeogenic enzymes, glucose 6-phosphatase, fructose-1, 6-diphosphatase, phosphoenolpyruvate carboxykinase, and pyruvate carboxylase, gradually decreased and there was no activity in the rapidly-growing tumors.[1,3,8-10]

At the same time the key enzymes of glycolysis, such as hexokinase, phosphofructokinase and pyruvate kinase gradually increased, reaching high values in the rapidly-growing tumors.[8-10] Thus, there was a marked shift in the balance of anabolic and catabolic processes with an emergence of a predominance of the catabolic, glycolytic pathway (Figure 1).[2,4,8-10] The marked alterations were further characterized by a failure of glycogen deposition and a pronounced rise in the direct oxidative pathway.[2,4]

As a result of these progressive biochemical defects, the liver cancer cell does not produce glucose or store glycogen. In contrast, it channels the energy of the glucose into glycolysis which provides energy for the multiplication of the cancer cell and into the oxidative pathway which provides ribose for nucleic acid biosynthesis.

With the increase in tumor growth rate, there was a parallel increase in DNA and RNA biosynthetic pathways with a concurrent decline in the catabolism of these macromolecules. As a result, a gradual imbalance produces more and more of the genetic and reproductive molecules available for the multiplication of the cancer cell.[6-10]

The gradual alterations of the protein and amino acid metabolism also revealed a correlation with the increase in hepatoma growth rate (Figure 2). There was a progressive rise in the incorporation of amino acids in tumor protein and a decline in the protein catabolic pathway.[5,8-10]

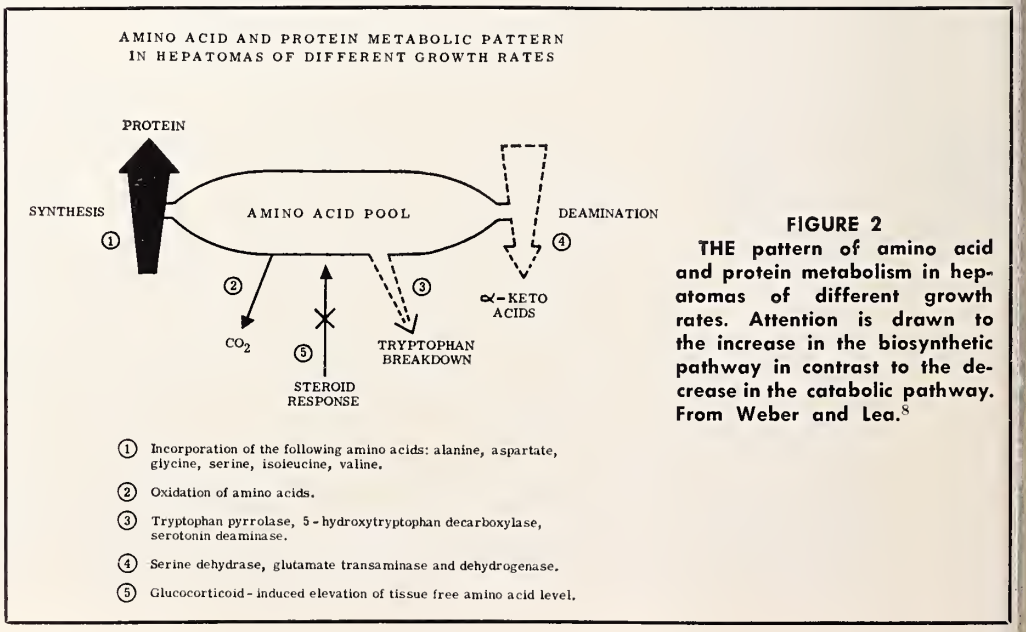


FIGURE 2
THE pattern of amino acid and protein metabolism in hepatomas of different growth rates. Attention is drawn to the increase in the biosynthetic pathway in contrast to the decrease in the catabolic pathway. From Weber and Lea.[8]

BIOCHEMICAL ALTERATIONS WHICH CORRELATE WITH THE GROWTH RATE OF HEPATOMAS

GLYCOLYSIS

Increased Glycolysis:

Increase in lactate production

Increase in Key Glycolytic Enzymes:

Hexokinase

Phosphofructokinase

Pyruvate kinase

GLUCONEOGENESIS

Decreased Gluconeogenesis:

Decrease in pyruvate conversion to glucose

Decrease in Key Gluconeogenic Enzymes:

Glucose 6-phosphatase

Fructose 1, 6-diphosphatase

PEP carboxykinase

Pyruvate carboxylase

PENTOSE PHOSPHATE PATHWAY

Increased Pentose Phosphate Pathway:

Increase in C-1/C-6 oxidation of glucose

HEXOSE PHOSPHORYLATION

Decrease of Specific Hexose Phosphorylating Enzymes:

Glucokinase

Fructokinase

Decrease in Fructose Metabolism:

Decrease in fructose incorporation into glycogen through fructokinase reaction

Decreased Responsiveness to Glucocorticoid:

Decrease in response of gluconeogenic enzymes

Decrease in glycogenic response

DNA METABOLISM

Increased DNA Synthesis:

Increase in DNA content

Increase in thymidine incorporation into DNA

Increase in formate into DNA

Increase in adenine into DNA

Increase in thymidylate synthetase

Increase in deoxycytidylate deaminase

Decrease in DNA Catabolism:

Decrease in thymine degradation to CO_2

RNA METABOLISM

Increased RNA Synthesis:

Increase in formate into RNA

Increase in aspartate transcarbamylase

Decrease in RNA Catabolism:

Decrease in xanthine oxidase

Decrease in uricase

Decrease in RNA Metabolic Response to Stimulation by Glucocorticoid:

Decrease in precursor incorporation into total tumor RNA after steroid injection

PROTEIN AND AMINO ACID METABOLISM

Increased Protein Synthesis:

Amino acid incorporation into protein (alanine, aspartate, glycine, serine, isoleucine, valine)

Activity of the post-microsomal protein synthesizing system

Ratio of total free amino acid to total protein content

Decreased Amino Acid Catabolizing Enzymes:

Tryptophan pyrrolase

Serotonin deaminase

5-Hydroxytryptophan decarboxylase

Threonine dehydrase

Serine dehydrase

Glutamate dehydrogenase

Glutamate-oxaloacetate transaminase

Ornithine transcarbamylase

TABLE I

Failure of Metabolic Balance and Regulation

The organism maintains homeostatic equilibrium by its ability to adapt. This capacity for self-regulation is based on the capacity of the cell to regulate the activity and biosynthesis of its key enzyme systems. In the cancerous cells some regulatory mechanisms still operate to a minor extent, but in the more rapidly-growing cancer cells the enzyme forming systems do not respond to physiological self-regulatory impulses. For instance, glucocorticoid hormones increase the key gluconeogenic enzymes in normal liver. However, this response is absent in the cancer cells, revealing an intensive genetic alteration in the neoplastic cells.[8-10]

In a normal animal, hepatic glucose 6-phosphate dehydrogenase is markedly decreased in starvation and increased 40- to 60-fold on refeeding. In the hepatoma cells this enzyme is markedly increased, and starvation or refeeding fail to have an influence on its activity.[8-10] Table 1 summarizes the metabolic and enzymatic alterations which can be well correlated with the

growth rate of the hepatomas. For a more complete documentation of this pattern and for the literature citation the reader is referred to reviews of this subject.[8-11]

The behavior of the metabolic pathways in hepatomas, regenerating liver and normal liver is pictured in Figure 3. In the normal liver there is a dynamic balance of the synthetic and catabolic pathways (upward and downward arrows). These arrows picture the direction of the overall metabolic pathways and the normal activities of the rate-limiting enzymes. The horizontal arrows refer to the bifunctional reactions, representing enzymes which are present in excess. The picture shows the imbalance of the metabolic pathways in the hepatomas.[8,9] The pattern is specific to the cancerous liver and is a different one from that observed in the rapidly-growing regenerating liver.

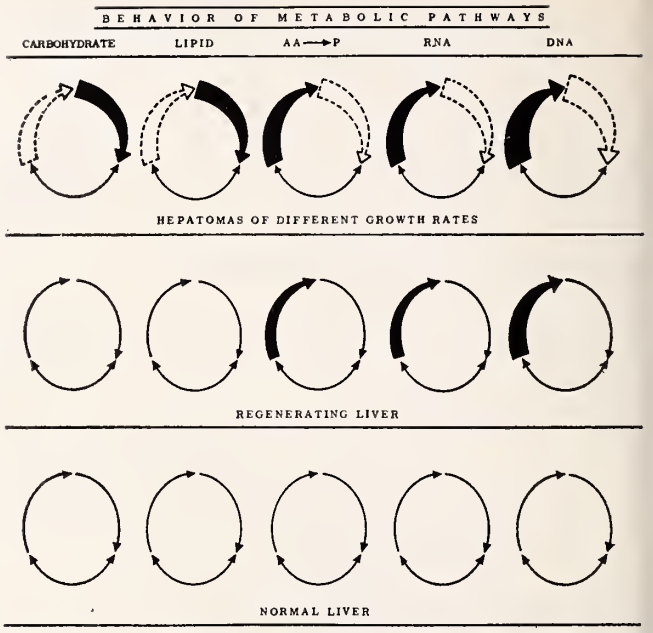


FIGURE 3
SUMMARY of metabolic pattern in hepatomas of different growth rates as compared to that of regenerating liver and normal liver in rat. Thin arrows indicate normal reaction rates and metabolic pathway activities. The heavy arrow, and also its thickness, indicates an increase whereas that of the dotted arrow indicates a decrease in overall metabolic pathway activity. The tapering of the arrows shows that the increase or decrease is a progressive one which correlates with the increase in the growth rate of the hepatomas; e.g., synthetic pathways of carbohydrate metabolism and the breakdown pathways of protein and nucleic acid metabolism decrease parallel with the increase in hepatoma growth rate. In contrast, the catabolic pathway of carbohydrate metabolism increases progressively, whereas the anabolic pathways in protein and nucleic acid metabolism increase gradually, parallel with the increase in hepatoma growth rate. The metabolic parameters which do not correlate with the growth rate are shown as the bottom half circle for each metabolic pathway. From Weber and Lea.[8]

Chemotherapeutic Approach

Current work is concerned with the utilization of the intensive knowledge achieved in elucidating the altered enzymology of the cancer cells. Current efforts are directed to achieve a control of the biosynthesis and activity of key enzymes in cancer cells. Such efforts aim to increase enzymes that are depleted in cancer cells or to inhibit or decrease enzyme systems which increase to high levels in cancer. The application of this "enzyme pharmacology" approach may hold the solution to the restoration of the altered homeostasis in the cancer cell and may retard or arrest the growth of cancer.

The success of actinomycin and methotrexate in providing cures for choriocarcinoma holds strong hope that suitable chemotherapeutic weapons will be uncovered when the physician is able to increase or decrease at will enzyme activities in various cells, tissues and organs.

Acknowledgment

The research work outlined in this paper was supported by grants from the United States Public Health Service, National Cancer Institute Grant No. CA-05034-07, the American Cancer Society and the Damon Runyon Memorial Fund for Cancer Research, Inc.

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Stress fractures occur in the femoral neck much less commonly than in other sites, but five instances were discovered in a two-year period in one training camp. Etiology, diagnosis and treatment are concisely covered.

Stress Fractures of the Femoral Neck

GEORGE A. RAPP, M.D.*
DAVID L. MOODY, M.D.†
Indianapolis

FRACTURES consequent to strenuous physical activity without antecedent acute trauma or generalized osseous disease occurring in radiographically normal bones have been known as stress, fatigue, insufficiency or march fractures. These constitute a common orthopedic problem in military basic training centers where young men are subjected to arduous physical activity to which they are unaccustomed. Metatarsal involvement is common, but fractures of the os calcis, tibia, fibula and femoral shaft are also encountered. Stress fractures of the femoral neck are uncommon. The five cases reported herein were encountered over a two-year period at Fort Jackson, South Carolina.

Review of Literature

Stress fractures were first described by Breithaupt[1] in 1855 who thought the clinical entity presenting in the feet of Prussian soldiers was traumatic inflammation of the extensor tendon sheaths. Shortly after the discovery of roentgen rays, Stechow[2] in 1897 reported the first radiographic evidence that Breithaupt's "march foot" was associated with fracture of the metatarsals. Numerous authors have since reported stress fractures of the toe, tarsal cuneiform, navicular and calcaneus, tibia, fibula, patella and femur. Less commonly reported have been stress fractures of the pubis, the lower cervical and upper thoracic spinous processes (clay-shovelers' fracture), the clavicle and first rib (in individuals carry heavy packs) and the humerus, radius and ulna in grenade throwers and shot putters.

Asal[3] in 1936 reported the first femoral neck stress fracture. Ernst[4] in 1964 reviewed the world's literature and discovered 25 cases; he reported 13 additional cases. Single cases of femoral neck stress fracture not reviewed by Ernst were reported by Bingham[5], Henry[6], Samuel[7] and Mansi[8] for a total of 42 cases in the literature. Devas[9], in 1965, reported 32 "stress" fractures, but many were in abnormal bone associated with osteoporosis, rheumatoid arthritis and steroid therapy. Recently, 41 cases in 36 men were reported by Blickenstaff and Morris[10] from several army training camps, the majority occurring from 1962 to 1966.

Femoral neck stress fractures are usually reported in the young adult male population which is a reflection of exposure to strenuous military training rather than a peculiarity of this group. The military recruit is particularly susceptible in the first few months of training, while stress fractures are rare in the well-conditioned, veteran soldier. Eight instances of bilateral femoral neck involvement are reported by Ernst and Blickenstaff and Morris, consistent with the known propensity of these lesions to be multiple or sequential, and suggesting a defect inherent within the individual involved.

Etiology

Numerous causal theories have been formulated including vascular insufficiency, nutritional deficiency, polyhypovitaminosis, local or systemic infection and weakness caused by the presence of the nutrient foramen.

The most prominently accepted theory, propounded by Wolfe and Robertson[11] as well as Hartley[12], is that the fracture is the result of repeated mechanical insult at the point of greatest stress, resulting in crystallization of the bone and subsequent fracture in a manner analogous to fractures in metals. This is supported by the work of Kuntscher[13] who subjected excised femora to a repeated 70 kilogram load and produced femoral neck fractures similar to stress fractures.

Carlson and Wertz[14], however, propose that muscle fatigue results in the transmission of the full weight directly through the osseous structures, thus producing an overload. This theory is supported by the clinical observation that stress fractures are more common in the poorly conditioned individual subjected to unaccustomed stress. It may be that both factors are operative, in league with a predisposing congenital architectural weakness, so that loss of muscle tone in the poorly conditioned individual results in transmission of repeated mechanical stress to a bone which is congenitally unable to withstand the added burden.

History and Physical Finding

The injury characteristically develops within the first few months of intensive basic training and is preceded by an episode of strenuous physical exertion to which the individual is unaccustomed. No history of

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acute trauma or an audible snap can be elicited. The symptom noticeable to the individual is the insidious onset of persistent dull aching pain in the hip on weight bearing which is relieved by rest. The symptoms may be so minimal that medical attention is delayed, as fracture is generally not suspected.

The individual walks with a limp, and the hip is flexed, with pain and limitation of the extremes of motion, particularly abduction and rotation. There is tenderness to palpation over the femoral neck and lateral perineum and pain with percussion over the greater trochanter or os calcis. No fever, erythema, muscle atrophy, reflex changes or sensory loss are present. Laboratory studies of calcium and phosphorus metabolism are characteristically normal.

Roentgenographic Findings

The radiologic diagnosis of stress fractures is predicated upon the normal radiographic appearance of the uninvolved osseous structures. Osteoporosis or other bony abnormalities are not compatible with the diagnosis of stress fracture.

The roentgen findings are insidious in onset. Two to four weeks may elapse after the initial injury before clearcut osseous changes are apparent. For this reason, stress fractures are easily overlooked, and if clinically suspected, serial films should be obtained.

The earliest roentgen abnormality we have noted is transverse buckling of the trabecular pattern on the concave inferior surface of the femoral neck. This is followed by bony resorption about the trabecular infraction resulting in a linear radiolucency. However, minimal callus formation, particularly endosteal in this location, may be the first apparent radiographic manifestation. Subsequently, there may be progression of the fracture to include the entire width of the femoral neck and displacement of the fracture fragments is relatively common.

Microscopic

Microscopic examination of stress fractures is fortunately uncommon, for misdiagnosis and resultant biopsy rarely occur. Those biopsies reportedly have revealed changes consistent with fracture union.

Microscopic serial sections of experimentally produced stress fractures reveal osteoclastic resorption of bone, but no decalcification, microfracture or cell death during the first week of stress. Periosteal and endosteal callus formation starts during the second week and if the inciting trauma is stopped at this stage, no fracture develops. If the stress is continued, a cortical fracture appears and bony resorption is completed at the end of three weeks. Maximum callus formation is seen at six weeks.[15]

Differential Diagnosis

1) Ligamentous sprain is the commonest clinical diagnosis. The absence of a fracture line or callus formation on serial radiographs over a three-week period eliminates stress fracture.

2) Osteogenic and Ewing's sarcoma may be differentiated from stress fracture by the presence of a fracture line which may be demonstrated with overpenetrated films or laminograms if obscured by callus. If a fracture line is not evident, the lack of bone destruction and the rapid progression of the callus on serial radiographs is helpful in excluding sarcoma. Clinically, sarcomas demonstrate a palpable mass and the pain is not relieved by rest.

3) Tuberculous and luetic osteitis may present radiographic findings similar to stress fractures. Absence of pain is characteristic of both. Tuberculous lesions usually evidence bone destruction without new bone formation. Serological tests help in differentiating luetic involvement.

4) Osteomyelitis involves constant pain not relieved by rest, accompanied by fever, leukocytosis, swelling and erythema.

5) Looser's transformation zones occur in advanced generalized bone disease and the radiolucency is static. No callus is observed.

6) Pathological fractures occur in diseased bone and are secondary to congenital defects, generalized systemic disease or metastasis.

7) Simple fracture secondary to trauma is excluded by lack of history of violence.

Prognosis and Treatment

Treatment is similar to that of traumatic fractures of the femoral neck. Displaced fractures require internal metallic fixation. We prefer multiple pin fixation, as the bone is usually very hard.

The incomplete fracture is treated with bedrest and traction for immobilization and relief of muscle spasm. If the fracture is completely through the neck and unstable, it should probably be fixed with multiple pins. Healing is usually rapid and complete, unless displacement occurs. The prognosis is poor in displaced fractures.

Case Reports

Case I. A 22-year-old accountant developed pain in his left hip during the third week of basic training. The pain persisted, so four days later he sought medical attention. Physical findings were limited to muscle spasm in the adductors of the left hip and pain on rotation past 90° of flexion. Roentgenograms revealed a nondisplaced linear fracture of the left femoral neck (Figure I). The patient was treated with Buck's traction for four weeks, followed by progressive ambulation on crutches. Roentgenograms seven weeks after the onset of symptoms revealed complete healing of the fracture.

Case II. A 23-year-old bank teller in his sixth week of basic training was running when he heard a snap and felt a sharp pain in his left hip. The leg collapsed and he fell to the ground. Roentgenograms revealed a displaced fracture of the left femoral neck (Figure II). The fracture was immobilized with four Moore pins and serial roentgenograms demonstrated the fracture progressing to sound union.



FIGURE 1
ROENTGENOGRAMS reveal a nondisplaced linear fracture of the left femoral neck in Case 1.

Case III. A 21-year-old draftsman was in his third week of basic training when he noted pain in his right hip. Roentgenograms revealed no abnormalities so he was treated with liniment and analgesics and given limited duty. The pain persisted. One week later he was referred to the orthopedic clinic where he was found to have pain in the right inguinal area with marked flexion of the hip or percussion over the right greater trochanter. Roentgenograms demonstrated a compacted nondisplaced fracture of the right femoral neck. The patient was treated with Buck's traction for four weeks followed by progressive ambulation with crutches. Roentgenograms eight weeks following discovery of the fracture revealed sound union.



FIGURE 2
A displaced fracture of the left femoral neck is evident on this x-ray.

Case IV. A 21-year-old clerk in his third week of basic training gave a history of insidious onset of pain in his right hip ten days previously, and a similar pain in his left hip of four days duration. Physical examination demonstrated pain on the extremes of motion of both hips. Percussion over the right greater trochanter or calcaneus caused pain deep in the right inguinal area. Roentgenograms revealed a minimally displaced fracture of the right femoral neck which was treated with Buck's traction. Subsequent roentgenograms revealed sound union of the right femoral neck at eight weeks, but a fracture was never demonstrated in the left femoral neck.

Case V. A 20-year-old auto parts manager was in his third week of basic training when pain developed in his left hip. Physical examination ten days later revealed pain deep in the left inguinal area on extremes of hip motion. Roentgenograms were normal, but the patient was treated with bedrest. Roentgenograms one week later demonstrated a nondisplaced linear fracture of the left femoral neck. Bedrest was continued for three more weeks followed by ambulation on crutches, and roentgenograms eight weeks after the onset of discomfort revealed union of the fracture.

Summary

Femoral neck involvement is a rare manifestation of stress fracture. The insidious onset of hip pain with weight bearing in a poorly conditioned individual subjected to arduous physical activity is characteristic. The fracture appears in normal appearing bone with no history of antecedent violence. Incomplete fractures are treated with traction and the prognosis is good; displaced and unstable fractures are best treated with internal metallic fixation. The prognosis in displaced fractures is guarded.

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Vasa praevia is a rare but very important cause of vaginal bleeding either prior to or during labor. Prompt diagnosis and treatment is important. Vasa praevia should always be considered in the differential diagnosis when vaginal bleeding complicates labor or delivery.

Vasa Praevia

HANS E. GEISLER, M.D.
DONALD L. CLINE, M.D.
*Indianapolis**

ONE of the rare causes of antepartum hemorrhage is vasa praevia, first described by Wrisberg in 1773.[1] Since that time, approximately 100 cases have been reported.[2-6] The best definition is that of Evans who described vasa praevia as: "a condition in which the fetal blood vessels, unsupported by either umbilical cord or placental tissue, traverse the fetal membranes of the lower uterine segment in front of the presenting part."[7]

Because three cases occurred in the last nine months on one obstetrical service, all charts with a diagnosis of antepartum hemorrhage from July, 1960, through April, 1966, were reviewed. A total of six cases of vasa praevia were found. None was diagnosed antepartum.

Case Reports

Case I. A 40-year-old G7, P5, with an EDC of mid-January, 1962, was admitted to the hospital on January 1, 1962, because of an episode of scant vaginal bleeding. The fetal heart rate was 140 and regular. No pain or abdominal tenderness was noted for 18 hours following admission. On January 2, 1962, she began having regular, moderately strong contractions every five minutes. She also had several episodes of bright red bleeding. Sterile speculum examination revealed the cervix to be 5 cm. dilated with bulging membranes and the head at a minus 1 station. Moderate bright red bleeding was noted and an amniotomy was done. The fetal heart rate remained stable but the fluid was meconium stained. After four hours of labor, a pallid female infant, weighing five pounds, nine ounces, was delivered with the aid of a pudendal block. The Apgar score was 6.

Inspection of the placenta revealed a bilobed placenta with vasa praevia. The cord hemoglobin was 12 gms. and the hematocrit reading was 41 vol. %. The infant was given 50 cc of compatible whole blood on January 3, 1962. Post-transfusion the hemoglobin was 16.6 gms. and the hematocrit reading was 50 vol. %. The infant did well thereafter.

Case II. A 19-year-old G1, P0, with an EDC of September 7, 1962, was admitted to the hospital on September 6, 1962, with the cervix completely effaced and dilated. The membranes were intact and the head was at a plus 3 station. The fetal heart rate was 124 and regular. Twenty minutes later the membranes ruptured spontaneously and the fetal heart sounds disappeared. The patient was immediately transferred to the delivery room and a pale, flaccid, poorly respiring, seven pound, two ounce, male infant was delivered under general anesthesia. The hemoglobin was 14.5 gms. and the hematocrit reading was 49 vol. %. The infant died five hours after birth during a transfusion. An autopsy revealed only bronchopneumonia. Inspection of the placenta revealed vasa praevia with a torn vessel.

Case III. A 34-year-old G7, P6, with an EDC of December 17, 1963, reported spontaneous rupture of the membranes on November 16, 1963. She was admitted to the hospital on November 27, 1963, with profuse vaginal bleeding, a blood pressure of 70/42, no abdominal pain and absence of fetal heart sounds. An immediate cesarean section was performed which revealed a partial placenta praevia, vasa praevia with one ruptured vessel, and a stillborn male infant, weighing six pounds, six ounces.

Case IV. A 36-year-old G5, P4, entered the hospital on August 28, 1965, at 38 weeks gestation. She was having a moderate amount of vaginal bleeding. The fetal heart rate was good, but the bleeding continued and the head was unengaged. Vaginal examination under a double set-up was carried out. No placenta praevia was found. A cesarean section was performed with the delivery of a seven pound, four ounce, living male infant. The Apgar score was 8. The placenta revealed vasa praevia with one torn vessel. The infant's cord hemoglobin was 14 gms. and the hematocrit reading was 45 vol. %. The infant did well and transfusion was not necessary.

Case V. A 17-year-old G1, P0, was admitted to the hospital at 40 weeks gestation. The membranes ruptured 16 hours prior to delivery. No bleeding was noted at any time and the fetal

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heart rate remained good during an uncomplicated labor and delivery. Inspection of the placenta revealed vasa praevia with a rent in the membranes through which the infant had delivered. Immediately adjacent to the rent was a large intact vein. The infant's hemoglobin was 19.8 gms.

Case VI. A 25-year-old G2, P1, with an EDC of April 28, 1966, entered the hospital April 12, 1966, because she had passed a large amount of dark, watery blood at home. The same type of bleeding continued after admission. The uterus was soft and not tender. Vaginal examination revealed the cervix to be 1 cm dilated, 50% effaced and the head to be at a minus 1 station. The fetal heart rate was 152 and regular. Immediate cesarean section was done with the delivery of a five pound, eleven ounce, female infant. The Apgar score was 9. Vasa praevia with a torn vessel was found. The cord hemoglobin was 13.2 gms. On April 13, 1966, the infant's hemoglobin was 8.6 gms. and the hematocrit reading was 30 vol. %. Fifty cc of whole blood was given. Following the transfusion, the hemoglobin was 15.5 gms. and the hematocrit reading was 47 vol. %. The infant was discharged in good condition seven days later (Table I, II).

CASE	PRESENTING SIGN	TYPE DELIVERY	RESULTS
1.	Scant vaginal bleeding	Vaginal	Good
2.	Fetal bradycardia	Vaginal	Infant died postpartum
3.	Heavy vaginal bleeding, fetal bradycardia	Cesarean section	Infant stillborn
4.	Moderate vaginal bleeding	Cesarean section	Good
5.	None	Vaginal	Good
6.	Heavy vaginal bleeding	Cesarean section	Good

TABLE I

Discussion

When vaginal bleeding occurs, either prior to or during labor, the diagnosis of vasa praevia must be considered. Most commonly, one of the vessels is ruptured in the course of labor and produces fetal hemorrhage. This was illustrated by cases #1, 3, 4, and 6. Less frequently, descent of the fetal head compresses the fetal vessels and, as in case #2, fetal cardiac slowing and irregularities appear.

In 1955, Apt and Downey[8] reported on a test used to distinguish alkali resistant fetal hemoglobin from maternal hemoglobin (Table III). This test can be applied to the antepartum diagnosis of vasa praevia. If fetal hemoglobin is found, immediate delivery should be carried out after which a cord blood hemoglobin and hematocrit should be obtained.

The perinatal mortality of 33% achieved in this group of cases, although better than that generally reported, is not an admirable one. Both the obstetrician and general practitioner must raise their index of suspicion and be more astute and specific in determining the etiology of antepartum bleeding.

Summary

Six cases of vasa praevia with a perinatal mortality rate of 33% have been presented. Cardinal points in diagnosis and management are:

1. All antepartum bleeding, not due to placenta praevia or placenta abruptio, must be thoroughly investigated to determine the etiology.

2. A high index of suspicion for vasa praevia must be maintained.

3. The use of the Apt test will aid in antepartum diagnosis.

INFANT	CORD OR IMMEDIATE PERIPHERAL HEMOGLOBIN	TRANSFUSED	RESULTS
1.	12.4 Gms	Yes	Good
2.	14.5 Gms	Yes	Died during transfusion
3.	————	—	Stillborn
4.	14.0 Gms	No	Good
5.	19.8 Gms	No	Good
6.	13.2 Gms → 8.6 Gms	Yes	Good

TABLE II

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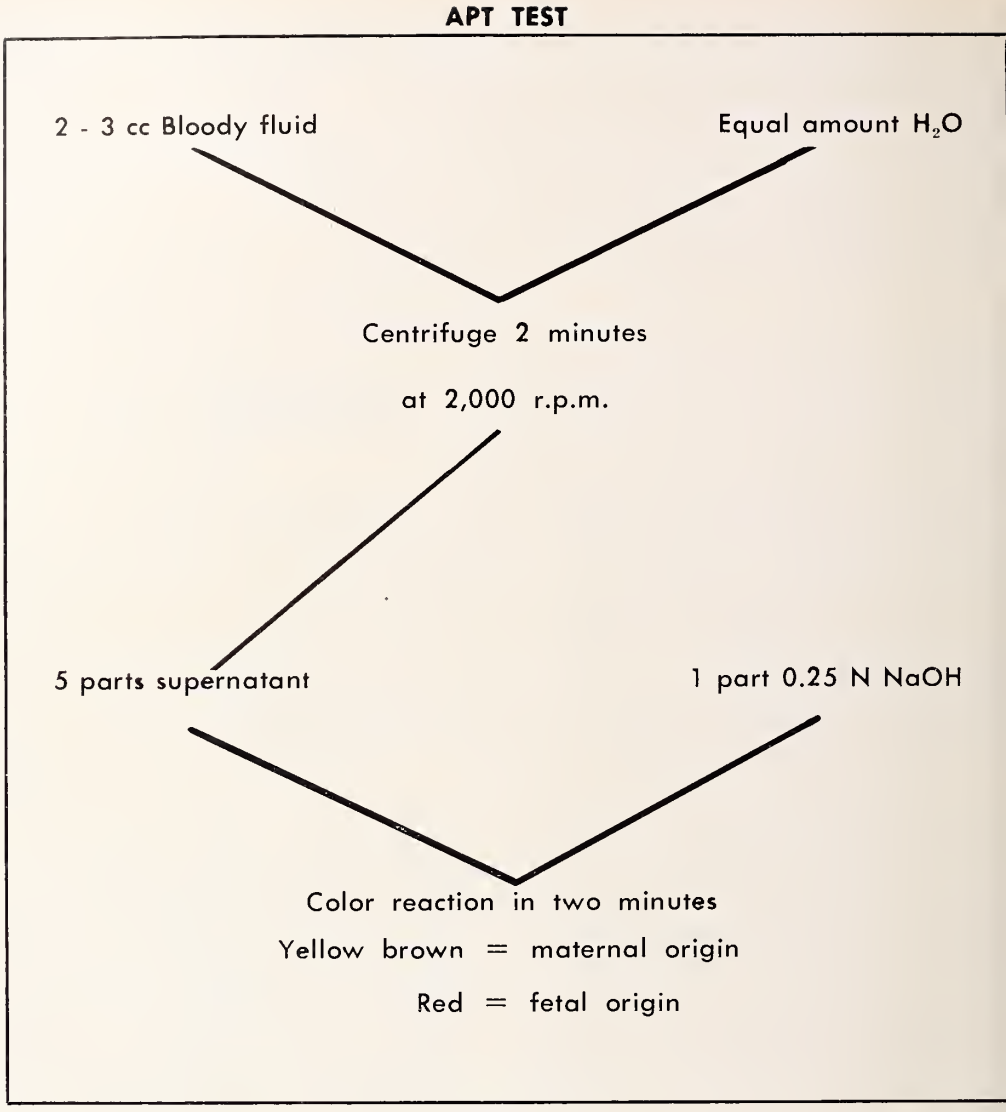


TABLE III

From *The Journal* 50 Years Ago

. . . The tonsils also have been blamed as being among the worst offenders from the standpoint of harboring foci of infection. Removal of the tonsils, therefore, has been advocated with the greatest enthusiasm by some internists and especially by the laryngologists. Whenever really indicated, this operation undoubtedly is of the greatest benefit, but the indiscriminate removal of tonsils, in the absence of definite evidence that they are really doing harm, ought to be condemned and stopped. The indications for tonsillectomy are fairly well known now; also the contraindications are known. Experience already accumulated shows without doubt that in some of the conditions for which tonsillectomy has been urged and performed, no good has followed. In every case there should be distinct evidence that the tonsils are foci of infection and are doing harm before they are condemned and enucleated.

The accessory nasal sinuses also have been looked on as capable of lodging foci of infection within them. In suspected cases of sinus infection, the Roentgen ray often is very helpful in detecting the presence or absence of infection. It is well worth while to focus the attention on these structures when searching for the seat of the focal infection. . . . Editorial, *JISMA*, April, 1917.

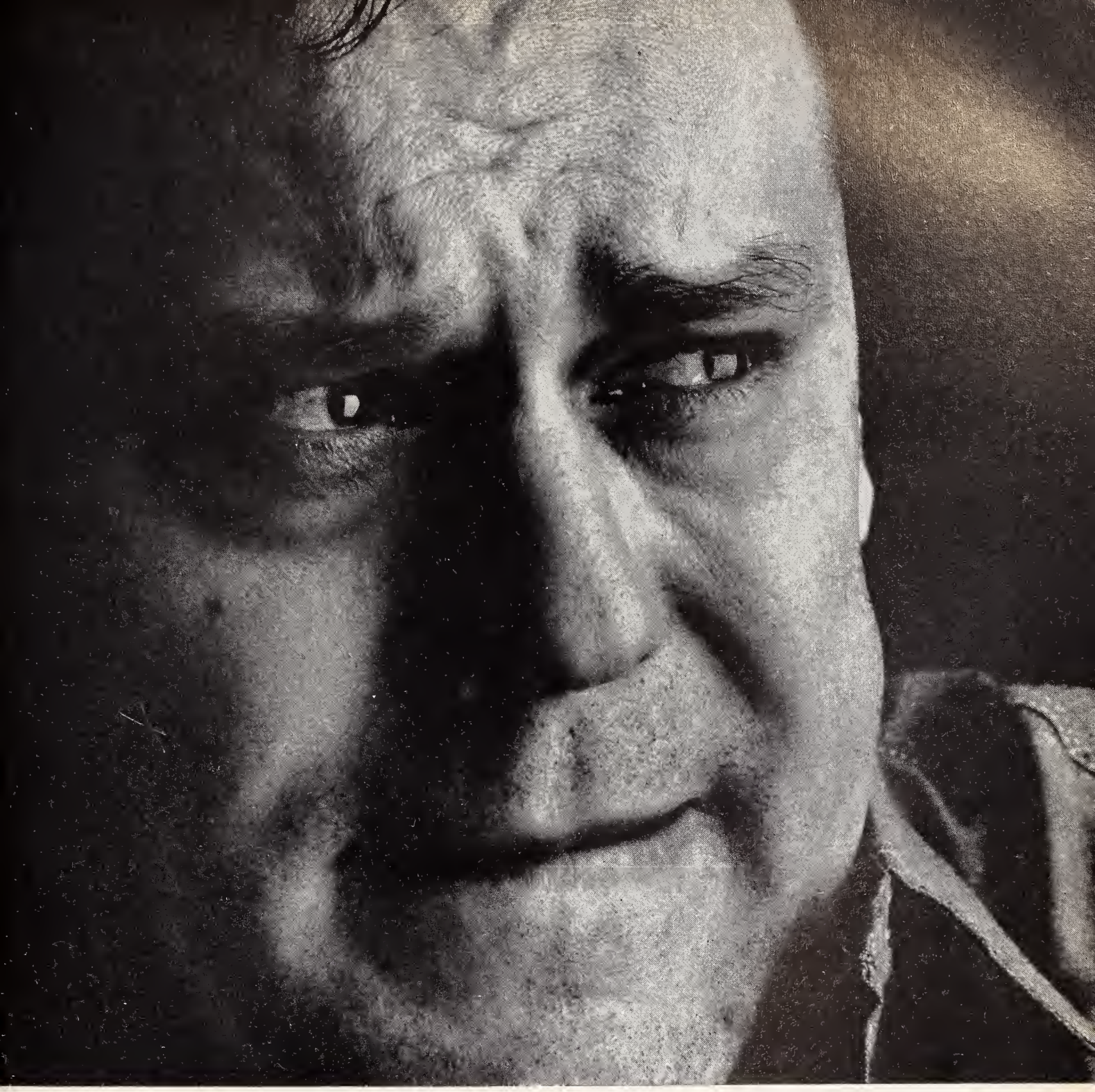


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Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

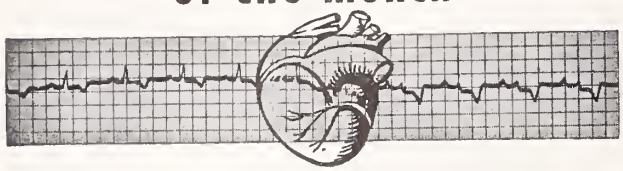
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Nonspecificity of T Wave Changes: Friedreich's Ataxia

CHARLES FISCH, M.D.
Indianapolis

THE T wave is the most labile component of the electrocardiogram. It is affected by changes in the temperature, electrolyte composition, acid-base balance, hormones, drugs, food, hyperventilation, autonomic nervous system and occasionally by respiration and change of position. There are many organic cardiac as well as primary extracardiac disorders which may alter markedly the ECG and specifically the T wave.

The tracing reproduced in Figure I was recorded in a 17-year-old boy with classical Friedreich's ataxia without demonstrable cardiac abnormalities on physical examination. The rhythm is sinus in origin. There is an abnormal degree of right axis deviation and the position is vertical. The R wave in V-1 is abnormally tall with an R/S ratio of almost 5:1. These changes suggest right ventricular preponderance (hypertrophy). In addition the ECG shows a well developed septal Q wave (AVF, V_6) and what appears to be a normal left ventricular pattern.

There are striking abnormalities of T waves in leads II, III, AVF, V_1 to V_6. Inversion of T waves in V_1 to V_3, although most likely abnormal, may represent residual of the juvenile pattern. Significantly the T wave changes seen here are impossible to differentiate in respect to their appearance from T wave changes produced by such entities as myocardial ischemia and infarction, pericarditis, digitalis, left ventricular hypertrophy, etc. ◄

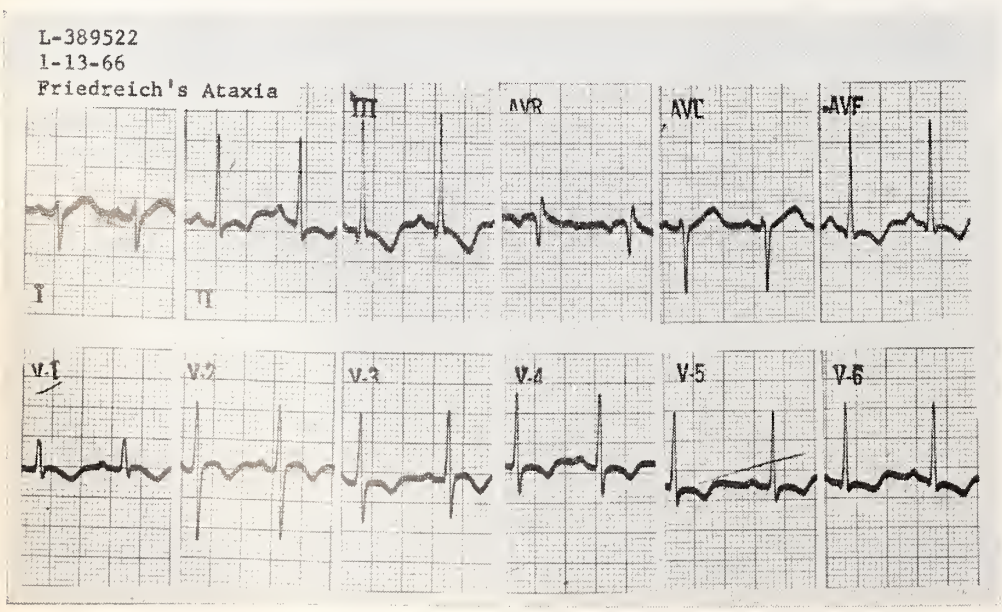


FIGURE 1
ELECTROCARDIOGRAM recorded in a 17-year-old boy demonstrates classical Friedreich's ataxia without demonstrable cardiac abnormality.

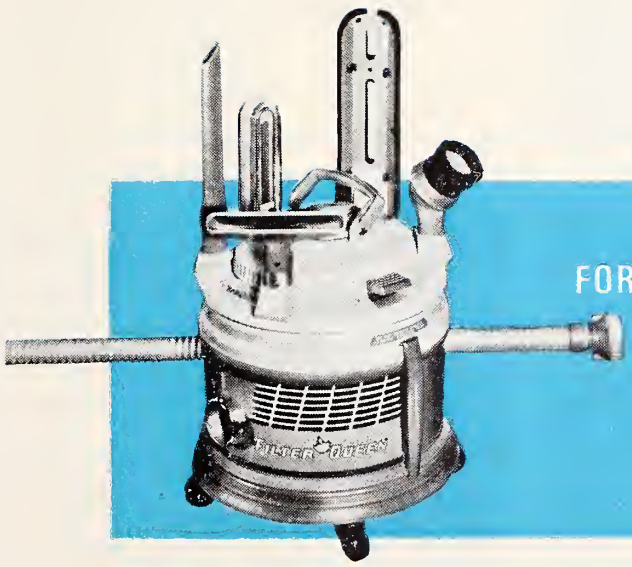
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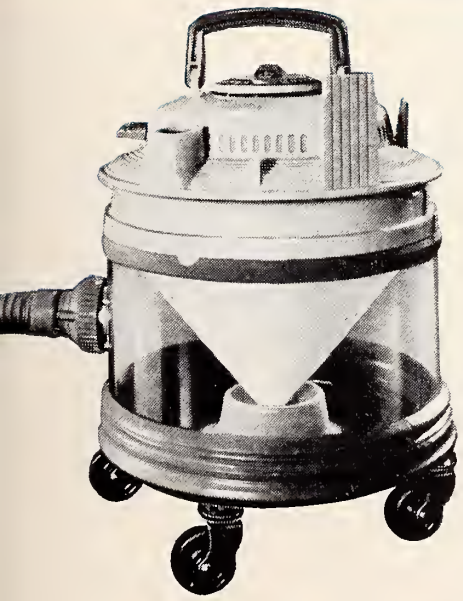
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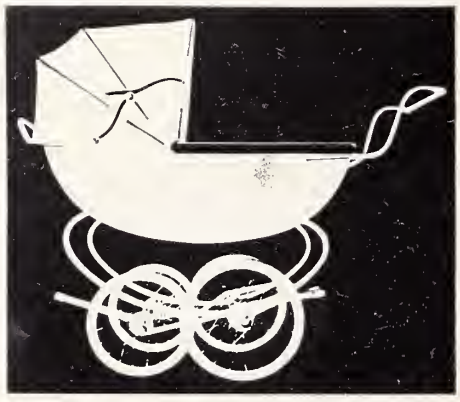


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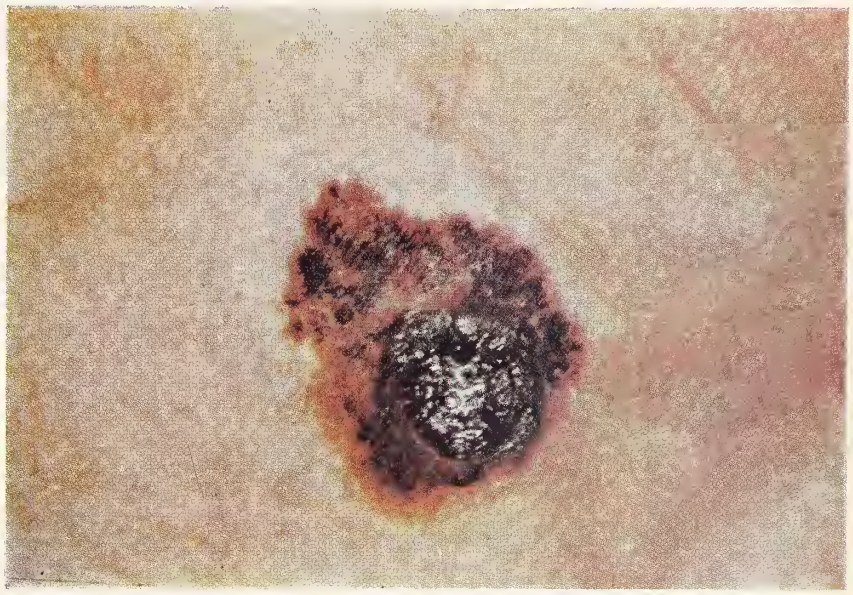
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Edited by
Edwin E. Pontius, M.D.
Indianapolis*



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What is your diagnosis?

What would you do to verify your diagnosis?

If you consider it benign, what would be your recommendations for treatment?

If you consider it malignant, what would be your recommendations for treatment?

For diagnosis and discussion, please see page 476.

* From the Pathology Section, Methodist Hospital of Indiana, Inc., Indianapolis 46207.

Supported by the academic activities and financial assistance of the Methodist Hospital Graduate Medical Center and the American Cancer Society, Indiana Division, Inc.

A hospital for the diagnosis and treatment of psychiatric illness

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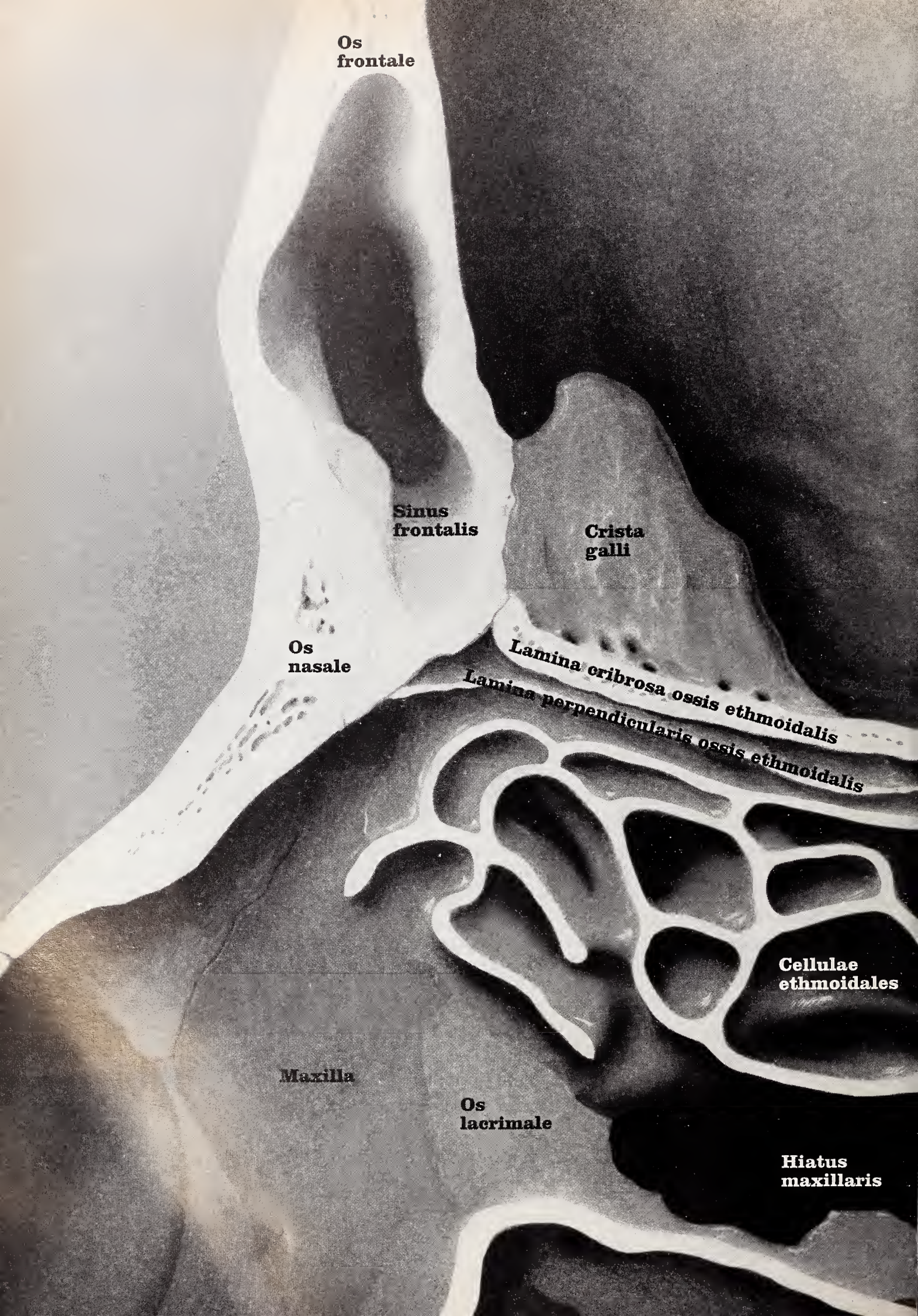
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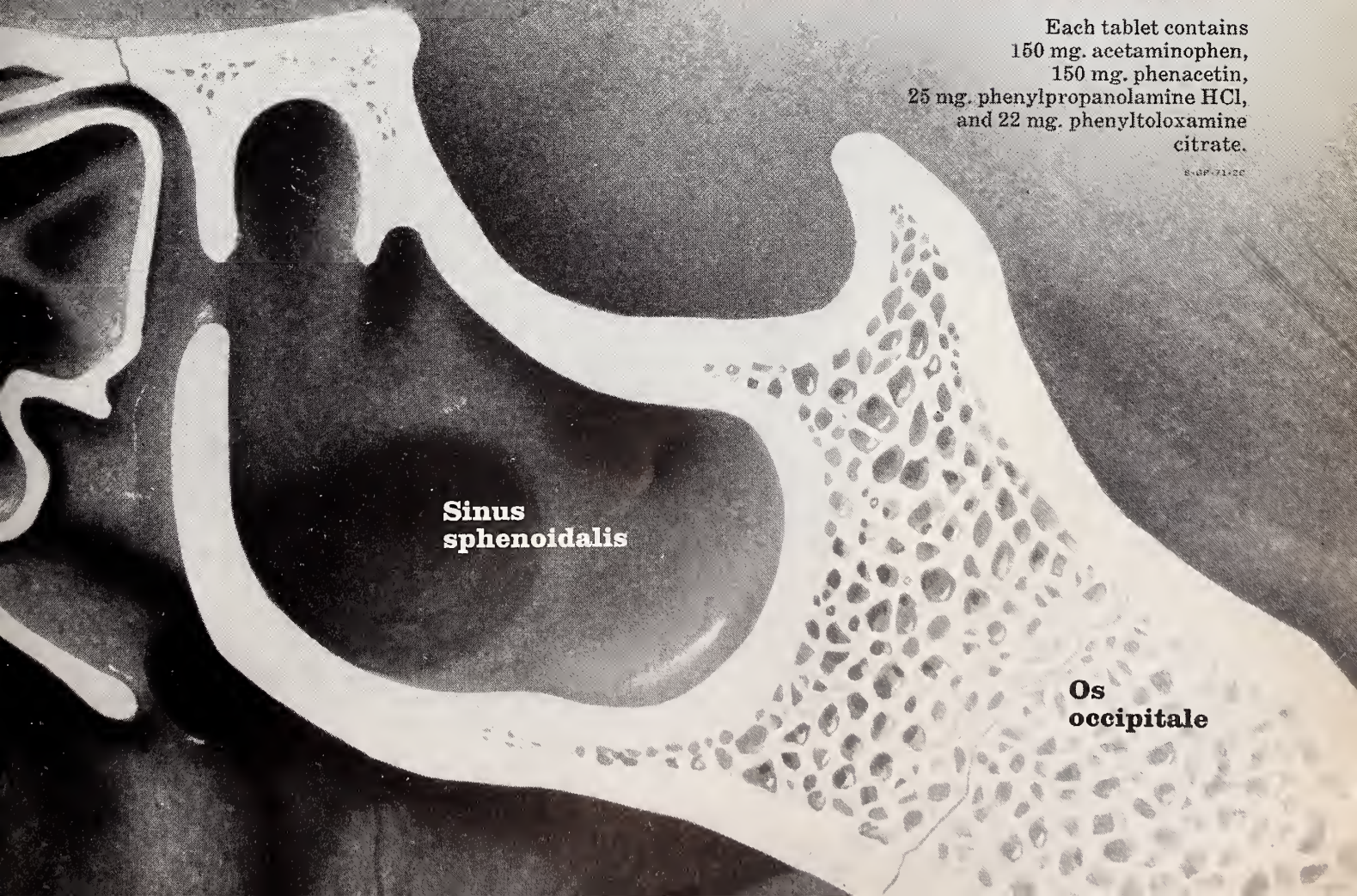
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X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Scalenus Anticus and Pectoralis Minor Syndrome

ERICH K. LANG, M.D.
*Indianapolis**

A 28-year-old white male was referred to us for assessment of a thoracic outlet syndrome. The patient complained of tingling and numbness in his left hand when working in a position with the left hand elevated above the head. Physical examination revealed dampening of the pulse during deep inspiration and particularly during abduction and elevation of the left arm. The clinical diagnosis of a scalenus anticus syndrome appeared likely.

The chest roentgenograms failed to reveal the presence of any osseous abnormalities such as a cervical rib.

A selective antegrade arteriogram of the left subclavian artery was carried out (Figure 1). Serial films recorded in neutral and in Lang's position revealed a normal appearance of the artery in neutral position but an oblique compression defect of the second portion of the subclavian artery at its point of transgression through the scalenus anticus tunnel. This was followed by an area of post-stenotic dilatation as well as a significant compression defect at the point of crossing of the pectoralis minor tendon, again followed by an area of significant post-stenotic dilatation in Lang's position.

On the basis of this study, the diagnosis of a combined lesion, namely a scalenus anticus compression syndrome as well as a pectoralis minor compression syndrome was established. Appropriate surgical correction consisted of scalenotomy, resection of the anterior first rib and severance of the pectoralis minor tendon. The postoperative result was considered excellent and the patient reported disappearance of all symptoms.

* Radiologist, Methodist Hospital, Indianapolis 46207.

Comment

Antegrade arteriography of the subclavian artery is considered the only modality permitting assessment of the subclavian artery under conditions reproducing and simulating actual physiologic stress. It is felt that the demonstration of constricting or obstructing lesions is often dependent upon a status of normal muscle tonus and necessitates ability of the patient to assume various positions reproducing the positions in which maximal discomfort is experienced. Moreover, the simultaneous presence of multiple lesions can only be suspected on the basis of arteriography since physical examination does not reveal whether one or multiple lesions are causing these manifestations.

Assuming various positions, such as hyperextension position, abduction of the arm, Adson's maneuver, and Lang's maneuver allows assessment of the subclavian artery under varied conditions. The ease of performing this procedure and lack of any significant complication have established this technic as a sine qua non in the diagnostic workup of thoracic outlet syndromes. Only on the basis of arteriographic demonstration of the causative abnormality can one select the appropriate surgical corrective procedure; scalenotomy, resection of the first anterior rib, resection of the pectoralis minor tendon or other corrective procedures. ◄

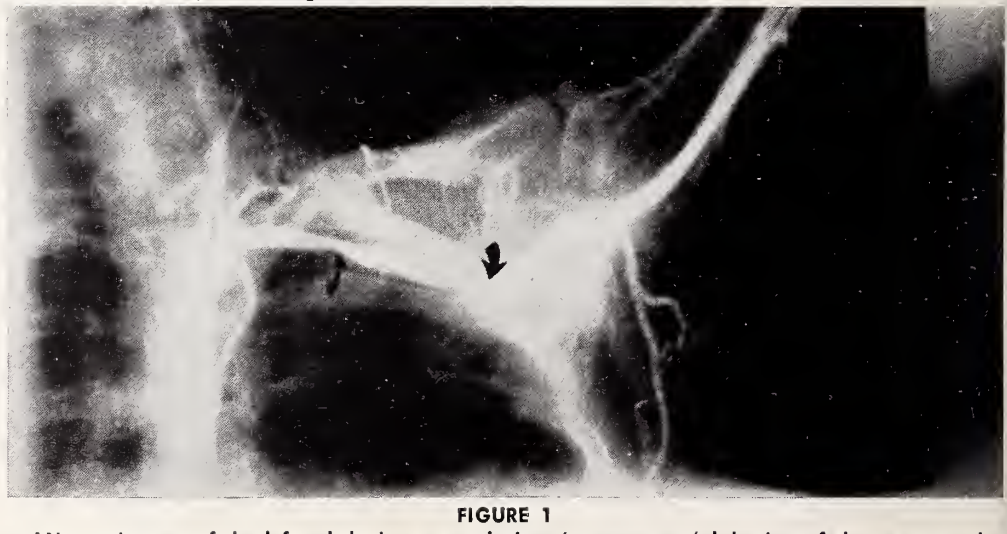


FIGURE 1

AN arteriogram of the left subclavian artery in Lang's maneuver (abduction of the arm, rotation of the head to the controlateral side, deep inspiration and arching of the neck) demonstrates an oblique compression defect of the left subclavian artery at the point of transgression through the scalenus anticus tunnel followed by an area of post-stenotic dilatation. A second marked compression defect by the pectoralis minor tendon was again followed by an area of post-stenotic dilatation. The hemodynamic significance of both these lesions is attested to by the degree of post-stenotic dilatation.



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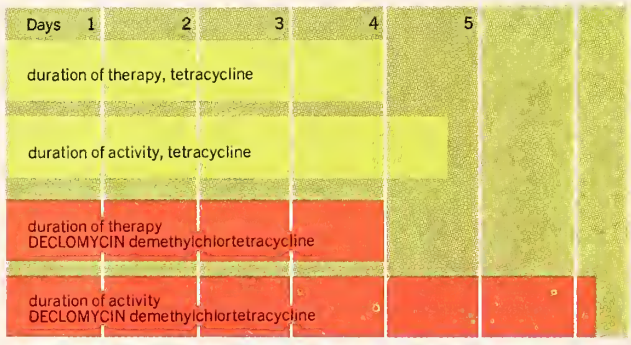
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Effective in a wide range of everyday infections — respiratory, urinary tract and others — in the young and aged — the acutely or chronically ill — when the offending organisms are tetracycline-sensitive.

Contraindication — History of hypersensitivity to demethylchlortetracycline.

Warning — In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects — Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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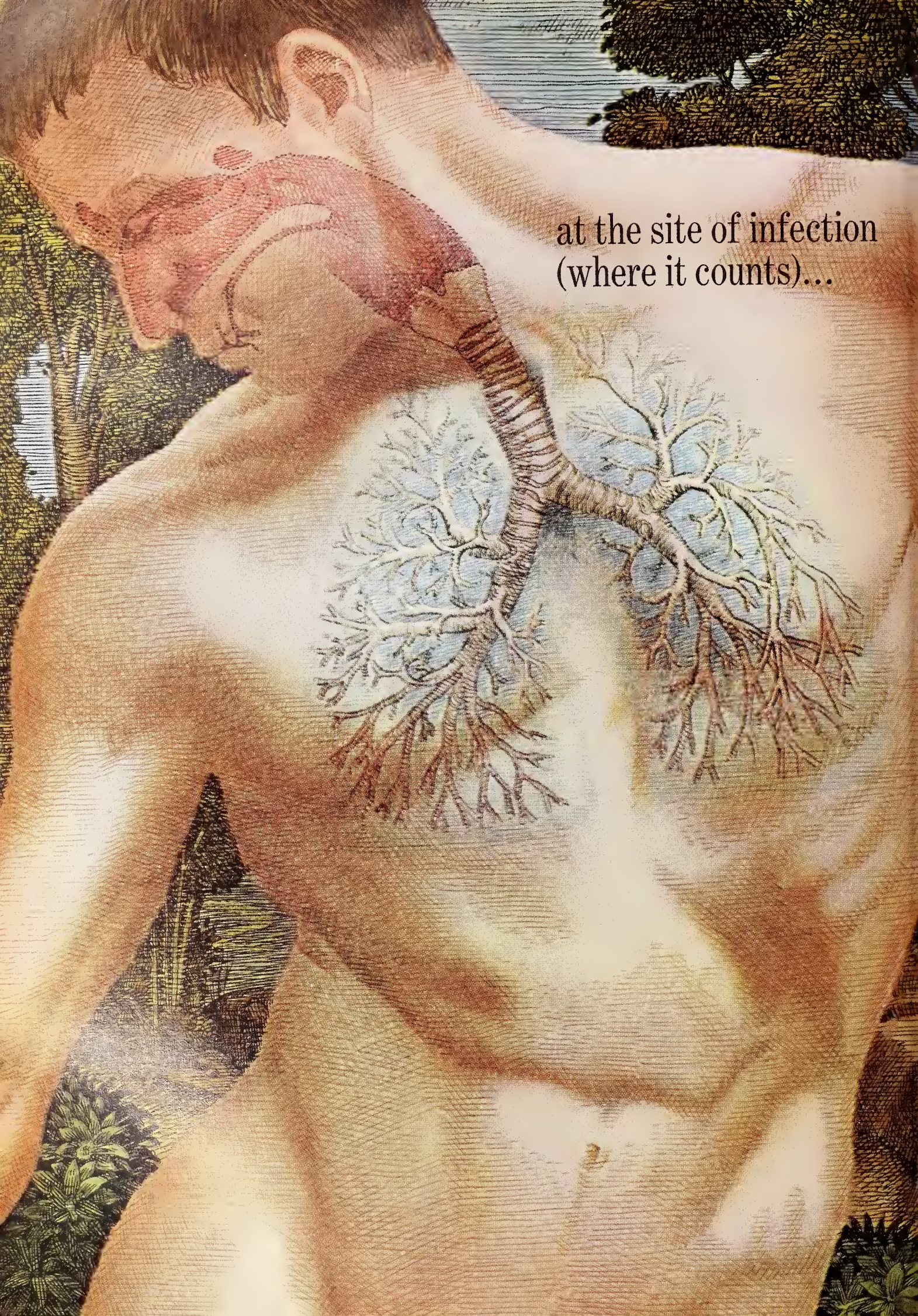
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Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

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Ilosone®

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Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
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Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended.[1] In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

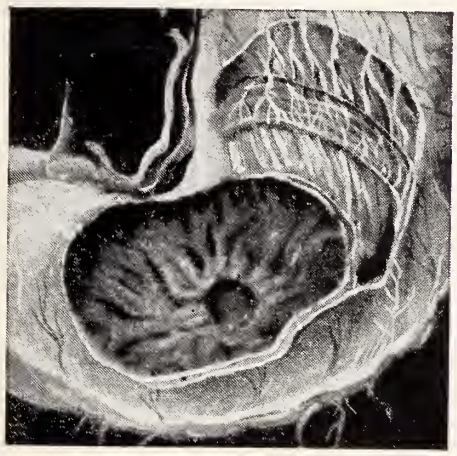
References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

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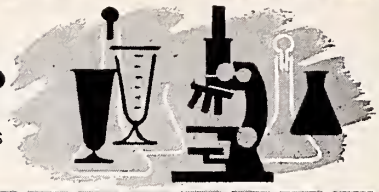
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Path-finder
PUBLISHED UNDER THE AUSPICES OF THE INDIANA ASSOCIATION OF PATHOLOGISTS



This series is intended to emphasize the importance of judicious selection and proper interpretation of newer laboratory procedures as applied to differential diagnosis of various diseases. It is edited by Leon L. Blum, M.D., Terre Haute.

Differential Diagnosis of the Month: HEMOLYTIC ANEMIA

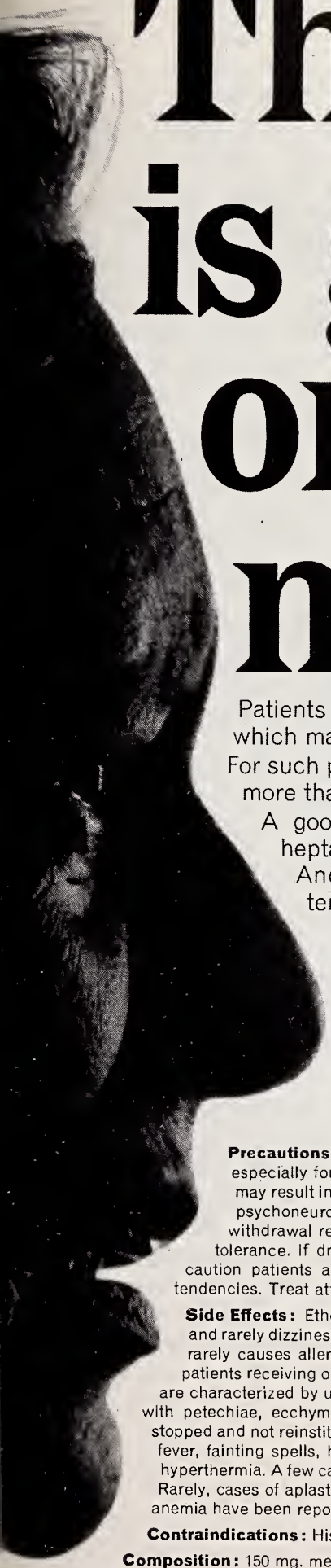
LEON L. BLUM, M.D.
*Terre Haute**

Clinical Data:	A 75-year-old woman was admitted as an acute medical emergency. She had not been in good health for the past eight years and had been under treatment for hypertension, nervousness, diaphragmatic hernia and other conditions. She also had been on a variety of medications for unexplained anemia but received no blood transfusions. She became progressively worse during the six weeks prior to admission with extreme pallor, weakness and shortness of breath. There was no history of abnormal bleeding and no family history of anemia or jaundice.
Physical Examination:	Obese female with palpable but not tender spleen and barely palpable liver. There was no evidence of glossitis and reflexes were normal.
Laboratory Data:	Hgb: 7.4 gm.; RBC: 2,400,000; hematocrit reading: 22; MCV: 90 cu. microns; MCH: 31 micro-micrograms; MCHC: 34%; WBC: 12,310 with 1% band forms, 70% segmented, 1% eosinophils, 24% lymphocytes and 4% monocytes. The blood smear showed a moderate anisocytosis, poikilocytosis and polychromatophilia and there were three metarubricytes (normoblasts) per 100 leukocytes. Occasional spherocytes, schistocytes and giant platelets were seen. Reticulocyte count: 11.5%; Serum iron: 111 mcg% (normal 60-135); Latent iron binding capacity: 177 mcg% (normal 150-250); Total iron binding capacity: 288 mcg%; Saturation: 38%; Serum haptoglobin: none; Direct Coombs Test: positive; Indirect Coombs test: non-specific-agglutinins clumping patient's own cells in a dilution of 1:1014 and commercially available pooled cells in a dilution of 1:32. Total serum bilirubin: 1.2 mg; Direct reacting bilirubin: 0.5 mg. Other chemical tests including electrolytes and pH of blood were normal. Paper electrophoresis revealed no abnormal hemoglobins. Bone marrow showed a moderate erythroid hyperplasia with increased iron deposits.

* 1505 N. Seventh St., Terre Haute 47808.

Differential Diagnosis:	Normal hematologic indices with abnormal red cell morphology in smear, reticulocytosis, increased serum bilirubin, erythroid hyperplasia of bone marrow and absence of serum haptoglobin point to the diagnosis of **hemolytic anemia.** Haptoglobin is a specific hemoglobin-binding globulin and can be measured as hemoglobin-binding capacity (HBC) in mg. Hb. per ml. of serum. Low levels (less than 0.5 mg. Hb.) are consistent with **acute or chronic hemolytic anemia.** Serum iron is usually elevated in hemolytic anemias but total iron binding capacity is normal. The anemia is quite frequently of macrocytic type. Urobilinogen excretion studies may be unreliable in mild cases. The lack of family history or personal history of anemia or jaundice since childhood points toward **acquired hemolytic anemia.** The positive direct Coombs test and demonstrable auto-agglutinins of "warm" gamma globulin type are indicative of **auto-immune hemolytic anemia.** The test is usually negative in congenital hemolytic anemias. Once this diagnosis is established, a search for diseases known to give rise to auto-immune hemolytic anemia is indicated. Such diseases are various lymphoproliferative and myeloproliferative disorders, collagen diseases, viral pneumonia, infectious mononucleosis, carcinoma and others. If such disease is not demonstrable the anemia is classified as **"idiopathic acquired auto-immune hemolytic anemia."** When "cold" rather than "warm" type auto-antibodies are present in this disorder, Raynaud's phenomena and hemoglobinuria may appear on exposure to cold.
Follow-up:	The patient was treated with corticosteroids and showed some improvement. Blood transfusions were withheld. She expired rather unexpectedly six months after discharge. Autopsy revealed a marked splenomegaly with evidence of erythrophagocytosis and other changes of auto-immune hemolytic anemia but no distinctive underlying disease responsible for hyperhemolysis. Mycotic granulomas of the lung were apparent complications of prolonged corticosteroid therapy. Death was attributed to cardiac failure.





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Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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The G. P. Club

THE General Practice Club of Indiana (G. P. Club for short) is now in its third year and is doing an outstanding job of accomplishing the objectives for which it was organized.

Several years ago members of the Indiana Academy of General Practice became aware of an intense desire on the part of many students at Indiana University School of Medicine for the type of information concerning the general practice of medicine that could not be provided in the regular curriculum. This resulted in several informal question and answer meetings of physicians in general practice and interested medical students, and eventually in the formation of a club for this purpose.

The G. P. Club is composed of students from all classes of the school of medicine. Members, upon graduation, are maintained on the mailing list during the intern year. Membership is now 350. There are no dues and each member, upon his request, may subscribe to *GP* magazine at one-half the usual subscription rate, with the Indiana Academy providing the other half.

Club meetings are held nine or ten times each year, scheduled far enough in advance to avoid conflicts and to assure adequate notice. Attendance varies from 50 to 200, the larger meetings being those to which members' wives are invited and urged to attend.

Most programs are presented in panel style, with general practitioners, specialists, hospital administrators, accountants, educators and special discussants participating. After the formal part of the program, a question and answer period is held. This is usually so active as to require a limitation of one hour in order to allow for mingling of the students and practitioners for refreshments and small discussion groups on an informal basis.

Typical subjects for discussion are as follows: Introduction to General Practice; A Day in General Practice; Preparation for General Practice; Utilization of the Laboratory in General Practice; Choosing an Internship; The Three M's — Money Matters in Medicine; Inter-Professional Relationships: The G. P. and the Consultant; General Practice in the Hospital: Hospital Privileges and Responsibilities; Preceptorship Program in Indiana; Office Accounting Procedures; The Doctor and Practical Politics; The G. P. and Psychiatry.

Care has been taken to assure that the G. P. Club does not compete with the Preceptorship Program of the school of medicine. Two years experience has shown that the club program complements the Preceptorship Program, and has provided an educational opportunity which is not available through any other means.

Dean Irwin and other members of the faculty have assisted in the formation of the G. P. Club, and have participated in many of the programs. The financial support of the club has been provided in part by Marion Laboratories of Kansas City, and also by members of the Indiana Academy of General Practice.

The enthusiasm and interest which has been displayed by its members in an extra-curricular activity of this type is the best possible index of the value and success of the G. P. Club.

Notes From a Medical Convention

THE speaker, James Alexander Miller, M.D., F.A.C.P., stood to deliver the convocational oration to the American College of Physicians. Excerpts from his address entitled "Whither?" run as follows:

"We are in the full tide of a period of progress in knowledge, in science, and in medicine, such as history has never before known. American medicine is in the forefront of this progress, and it is the great privilege of our generation to be participants in it.

"Although the medical profession is giving a service of a higher quality than ever before, although the general

health of our country measured in terms of general morbidity and mortality has been progressively improved, yet there has probably never been a time when the medical profession has been under more widespread criticism. This anomalous situation is disheartening, and a constant source of wonder to us.

"Security, which nowadays appears to be more desirable than adventure, has become our important concern, to be militantly defended.

"A not unimportant factor in this situation is the more general diffusion of knowledge, or, at least, information, concerning matters medical. We physicians ourselves have fostered this change.

"Probably one of the most justifiable bases for criticism of present practice is the comparative neglect of social and preventive medicine.

"The barriers between preventive and curative medicine must be broken down. This cannot be achieved by adding a few courses to the curriculum. A new attitude must be developed. The student must become interested in health, not only in disease. Clinical medicine must be taught differently from heretofore.

"The president of the United States has said that America should be the arsenal for the democracies. For us it must be more than that. America must also be the citadel of free and independent scientific thought if the present is to be saved and the future assured. This College is one of the important bastions of that citadel.

"Our cloistered existence, which keeps us enveloped in the effort to attain knowledge and to put this knowledge into practical application, is outmoded, and we must widen our horizon to include the larger field of social and community responsibility.

"We hear much of such watchwords of modern social progress as 'security,' 'rights,' 'privileges.' We hear all too little of that more fundamental requirement, 'obligation.'

"When a practitioner ceases to be a student, his quality begins to shrivel and finally to die.

"It is my impression that in spite of the inevitable development of specialism, which has modified the intimate personal relationship between physician and patient of former days that, individually, the warm feeling of understanding and affection for physicians as personal and family friends still persists."

Well, not everyone present took Dr. Miller's comments too seriously. Some were reading about Dom DiMaggio's exploits with the Boston team, which would lose to Washington 12-5 later in the day. It was a nice, clear day in Boston, with the temperature in the 50's—a fine day to be in the Public Gardens, or to plan how to buy a new Cadillac for $1,345. A few copies of the best sellers, *For Whom the Bell Tolls*, and *Blood, Sweat, and Tears*, were noted in the audience.

The date was April 23, 1941. That's the trouble with convocational addresses. The speaker gets too concerned with events of the present and only the immediate future, and in a few years his comments are no longer pertinent. After all, "times change." Or do they?—J.W.H.

Guest Editorials

Socialism In Saskatchewan: A Fiasco

SASKATCHEWAN for 20 years—from 1944 to 1964—had a Socialist government—about the only one in North America, except Castro's.

In 1944, the Socialists said they would solve the unemployment problems by building government factories. They promised to use the profits to build highways, schools, hospitals and to finance better social welfare measures generally. Over the years they set up 22 so-called crown corporations. I wish that time permitted me to tell you of the fiasco that followed.

By the time we had taken over the government, 24 months ago, 12 of the crown corporations had gone bankrupt or been disposed of. Others were kept operating by repeated and substantial government grants.

During the whole period the Socialists waged war against private business. The making of profits was condemned as an unforgivable sin. What was the result? Investors simply turned their backs on the Socialists. Dozens of oil companies pulled up stakes and moved out. Gas exploration ground to a complete halt. Prospecting in our vast north became almost nonexistent.

During the period Canada was experiencing the greatest economic boom in her history, Saskatchewan received only a handful of new factories. After 18 years of socialism there were fewer jobs in manufacturing than existed in 1945—this despite the investment of $500 million in crown corporations.

The Socialists promised a greatly expanded program of social welfare measures: there was to be "free" medical care, "free" hospitalization care, "free" drugs and so on. The money to finance these projects was to come from the profits of the crown corporations. Of course, in the overall picture, there were no profits—rather there were colossal losses. Thus the welfare program had to be financed from taxation.

During the period more than 600 completely new taxes were introduced; 650 other taxes were increased. "Per capita" taxes in Saskatchewan were soon substantially out of line with our sister provinces—one more reason why industry located elsewhere.

Twenty years ago the Socialists promised to make Saskatchewan a Mecca for the working man. Instead, we saw the greatest mass exodus of people out of an area since Moses led the Jews out of Egypt. Since the war, 270,000 of our citizens left Saskatchewan to find employment elsewhere.

Finally our people decided they had been the Canadian guinea pig for socialism long enough. They threw them out.

It is the task of our new government to prove in the next few years that the private enterprise system can

do more for our people than socialism.

If there are any Americans who think that socialism is the answer, I wish they would come to Saskatchewan and study what has happened to our province.—**From an address by the Hon. W. Ross Thatcher, premier of Saskatchewan, before the Edison Electric Institute in San Francisco, June 8. Published in** *PG and E Progress*, **43: October, 1966. Reprinted with permission.**

Drug Quality: Mind Your P's & Q's & R's

IN the months just ahead, the relationship between generic and trade-named drugs will be subjected to sharper-than-ever study. This study will be more meaningful if the *p*'s & *q*'s & *r*'s of drugs—*any* kind of drugs—are carefully considered. The *p* refers to *price* . . . the *q* to *quality* . . . and the *r* to *research*.

In marketing a drug, some companies will provide only *price;* other companies will provide *quality;* and still other companies will provide *quality* and *research*.

The more a company provides, the higher a drug's price is likely to be. Thus, a company that provides drugs at the cheapest prices tends to sacrifice quality and research — as it cuts corners to cut costs. At the other end of the scale, the company that provides quality and research will be spending the most, because it provides the most. Therefore, its prices will tend to be higher.

Incidentally, by *research*—I refer not only to a company's search for *new* drugs, but also its *continuing* efforts to improve the quality of its *older* products . . . pharmaceutically and clinically.

To sum up: (1) From the standpoint of therapeutic effect, *the lowest-priced* generic drugs tend to be the *least* desirable. Such products may be "manufactured for" or "distributed by" the company whose name appears on the label. (2) It is possible for a generic drug to be of good quality, but such a drug is unlikely to be the lowest-priced generic. (3) When applying *p*'s & *q*'s & *r*'s, pharmacists should evaluate a manufacturer in terms of integrity, facilities, and trained personnel. In other words, *who makes the drug product?* (4) The product that is backed by quality and research is the *best* one—*regardless of whether it is sold under a trade name or a generic name.*

Thus, in the patient's interest—from both the immediate and long-range view—**PQR Drugs** are the *best* drugs that you can dispense!—**Irving Rubin, R. Ph., Editor,** *American Professional Pharmacist*, **February, 1967. Reprinted with permission.**

Editorial Notes...

Engineering professor Paul E. Stanley of Purdue has returned to the campus, after an 11-month leave of absence as a consultant on engineering to a large Midwest hospital, full of advice and experiences. The experiences had to do with the use of electricity and electronic equipment in hospitals. The advice is BE CAREFUL. The purchase, installation, maintenance, repair and operation of the electronic instruments in a modern hospital demands the services of a competent electrical bioengineer to make them safe and properly functional. Serious accidents are possible and these are not necessarily associated with the higher voltages.

50,000 United States citizens will become newly diagnosed cases of tuberculosis this year. This will be in addition to many thousands who will have relapses of previously diagnosed tuberculosis. *Health Insurance News* observes that this is a pretty vicious onslaught for a disease which is thought of, although without much justification, as being "conquered." It is a disease associated with poverty and is occurring now mostly in the large cities. It can be eliminated by adequate detection, care, long-term chemotherapy and improvement of economic conditions.

Motor vehicle accidents produced a death rate of 27 per 100,000 population in 1966, the highest rate in 25 years. Fatalities are increasing faster than the total mileage traveled, according to statisticians of the Metropolitan Life Insurance Company. Accidents from all causes were up in 1966—approximately 112,000 deaths were recorded. The catastrophic accident toll was lower than usual but home and auto accidents accounted for the increase.

The average length of hospital stay for patients 65 years of age and over rose from 11.2 days in July, 1966, to 13.3 days in December, 1966. The stay for patients under 65 for the same period remained relatively constant at 6.8 days. ◀

President's Page

Dear Doctor:

It will soon be time for us to consider those resolutions of the Indiana State Medical Association which should be put before the House of Delegates of the American Medical Association. Since it has been the custom for the Council to meet with the delegates to the American Medical Association prior to the AMA Convention, it would be well for you to put these resolutions in the hands of the executive secretary and/or your councilor sometime in May. This would give the Council time to study your proposals and to write out proper resolutions.



I feel that if we are to make this a democratic organization, each member must have the right to submit his ideas to the Council and have them transferred according to the policy of the House of Delegates. I will appreciate any letters from you concerning resolutions that you feel might be formulated. I believe that our problems are many. It would seem to me that someplace along this road to Socialism, medical organizations must take a stand. I firmly believe that when the Executive Committee goes to Washington to talk to our representatives and senators on April 10, 11 and 12, that they should have drawn the line. I would hope that we have a unified front.

It has been said that the chain is no stronger than its weakest link. Recently, at a meeting I attended, one doctor said he belonged to the Indiana State Medical Association, that he paid his dues, read what they had to say but he did not participate. Within one-half hour of that time, this same man was complaining about something he felt the Indiana State Medical Association had not done for his specialty group. One cannot consider a member a supporting member just because he pays his dues and reads *The Journal*. He must take an active part in his organization at the county level, district level and the state level.

I assure you that your letters of complaint and of suggestion are read wtih deep concern. With Medicare now some 10 months in operation, and with all the trials and tribulations it has brought to me and my practice, I am very surprised that the mail I have received is scanty. I would have expected letters of constructive criticism of the way that ISMA has handled Medicare; I would have expected letters of suggestion. While predecessors may state that I am asking for a deluge of unfavorable mail, I feel that I am asking the membership of the Indiana State Medical Association for constructive criticism of the president, the Executive Committee and the Council. Such letters might give to all three deep concern and even a paranoid emotional reaction—but at least we would know that the membership is not apathetic.

The summer months are coming and many of your counties will be on vacation the whole summer. I hope that if you are going in the month of May, that you will draw resolutions for the Indiana House of Delegates before you leave and show your concern for improvement of the health and improvement of patient care in the state of Indiana. Thus, I challenge you to bring to the Indiana State Medical Association and the American Medical Association your own profound deliberations concerning all facets of medicine in order that your organizations may move positively forward knowing full well that the policies made by your policy-making groups are in keeping with the majority of the grass-root membership.

May the vacation that most of you take this summer be enjoyable and refresh you for the sake of your patients and your family. May you return home eager to help solve the many problems—medical, economic and social—that face us all today.

Eugene S. Nelson M.D.

The Woman's Auxiliary

REPORTS TO ISMA

It has been both a unique privilege and a serious obligation to report to you on this page each month. I have attempted to bring to your attention the actual accomplishments, the potential achievements and the program material available, with which to reach these goals.



As the year progressed, I have been more and more impressed by the unlimited store of natural ability which your wives possess, much of which is yet untapped. It has been most gratifying and stimulating to visit the various county groups and hear their enthusiastic discussions of their many projects aimed at "assisting the AMA's program for the advancement of medicine and public health," this being the first object of the auxiliary.

In many counties where the number of members is so small that most suggested projects are not possible, the emphasis is placed on another objective, "to cultivate friendly relations and promote mutual understanding among physicians' families."

The annual reports coming in from county presidents reveal an almost 100% participation in all sorts of community health programs sponsored by other groups. The total number of volunteer hours contributed by auxiliary members runs into the thousands.

May I, in closing, quote the last lines of my installation message a year ago? "Will you, along with me, accept the challenge of enlarged fields of service, and, through dedicated effort, strive to ever more fully enrich our husbands' high calling? Let us all, 'Go Forth to Serve.' "

Mazo D. Scales

The Rocky Road Ahead*

WILLIAM F. SHEELEY, M.D.†

CHANGES in conception of mentally ill people and of their care are generating pressures to change correspondingly the institutions, the facilities and the programs which we offer our mentally ill citizens. These pressures arise in part from the growing public realization that the system of custodial management in vogue for over a century is bankrupt; they arise in part from growing public discomfort when mental patients are simply banished to a high-walled megapolis of the sick; they arise in part from expanding and sharpening psychiatric knowledge and skills — mental health professionals are more capable than ever before, given the facilities, to come to grips with psychiatric disorders and substantially improve them. The gap is widening rapidly between what we could be doing for our mental patients and what we, in fact, are doing for them.



We face, then, a period of change. This could be a period of great and pervasive change. And change is always an agonizing thing. Change obliges us to abandon our comfortable old ways of doing things and to start strange and frightening untried programs whose validity is by no means assured. Worst of all, perhaps, change demands that we think. It demands that we examine critically assumptions that we have long taken for granted. It demands that we say to ourselves: "We have always done it this way. Therefore, this way is probably wrong. What is a better way?" It demands that we contend against one another as we differ over issues which heretofore have not even concerned us.

Change Brings Upheaval

Change obliges us to raise questions which by their very being raised imply criticism of ourselves, of our competence, indeed of our integrity. This criticism and its resulting embarrassment and pain cannot be avoided. The cliche mongers tell us that one cannot make an omelette without breaking an egg. We cannot solve a problem without throwing upon it the harsh light of general scrutiny. We must face the truth directly. We must, therefore, bear the burden of exposing not only ourselves, but also our friends and colleagues. This is a hard task—a disagreeable task—a necessary task.

Indiana has said that she sincerely wishes to improve the care of her mentally ill citizens. If this be more than pious sloganeering, Indiana must be willing mercilessly to expose her sacred cows to incisive analysis. She must be ready to abandon to history many venerated misconceptions and to dismantle many facilities and programs which she has loved, but which by their very ineffectual existence have blocked the development of better facilities and programs. She must raise many searching and uncomfortable questions. The questions imply issues which must be debated thoroughly. These questions are far too many and too complex to detail here, but I shall raise a few by way of example:

1. How can we keep our institutions and programs from hurting people?
2. How can we repair the damage of years of custodialism?
3. How can we avoid unnecessary or unduly prolonged institutional stay?
4. How can we render unto Caesar that which is Caesar's?
5. How can we provide continuity of care?
6. How can we restore patients to maximal socio-economic function?
7. How can chronically and untreatably ill people live in their own home towns?
8. How can state, county and city share the financial burden amicably?

To get some idea of the rocky road ahead of us, let us examine each of these questions briefly.

How can we keep our institutions and programs from hurting people? One of the problems which confronts every physician is the fact that whatever he does to treat his patient may also harm him. He must weigh the anticipated good of a proposed treatment against the possible bad. The Hippocratic Oath of ancient times recognized this danger as it implored the physician, above all, not to do harm. Surgery may save life, but it also exposes the patient to the risk of dying from the anesthesia; antirabies treatment of a dog-bitten boy may itself kill that boy; tearing a child from his family to house him on the pediatric ward of an excellent hospital may both terrify and depress him even as it improves his physical health; the protective asylum of a mental hospital may enable a patient to sort out his tangled emotions, but also sap his vigor and render him unable to fend once more in the real world. What do we do in our caretaking institutions and clinics, which themselves make people sick? Is just being in the helpless position of a patient itself a noxious thing? Or do we do something to these patients which all too often reduces them to spineless nonentities?

Having raised the question of dam-

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* Delivered to the Mental Health Association in Indiana annual meeting, Indianapolis, March 16, 1967.

† Dr. Sheeley is the new Indiana Mental Health Commissioner. He will assume his duties May 1.

aging patients in our institutions, let us pose the next question:

How can we repair the damage of years of custodialism? We have been told that our patients become spineless because we place them in settings which aim only at keeping them as quiet and unobtrusive as possible. We prize most that hospital which causes the least fuss. We warn the hospital: "Don't make waves." True, we try to assuage our consciences. We provide reasonably well for our patients' creature comforts. We feed and house them. We even give them innocent amusements. All we take from them is authority over their own persons and lives. We take away their responsibility for themselves. Without consulting them, we think for them; we decide for them; we plan their lives for them. And as we do so, we assume implicitly and explicitly that the future holds no hope of change for them. We stifle their present; we erase their future. We make zombies of them. What can we do to help the patient chip off the barnacles accumulated from the months or years he has drifted in this ennervating sea? How can we regenerate in him an assertive sense of responsibility for himself? How can we bring ourselves to tolerate the patient as he becomes no longer the docile animal upon whom we now so easily impose our will?

So, we have the problem of repairing the damage which we have done these many years to those patients who have long been with us. But what of the patient who has not yet been damaged—who has not yet even joined us: *How can we avoid unnecessary or unduly prolonged institutional stay?*

Too Many "Barnacles"

If it be true that any hospitalization for any cause — mental or physical illness — unavoidably poses the threat of patient dependency and desuetude, then we can assume that every day which a given patient stays needlessly in a hospital or other institution may damage him needlessly. The surgeons have long since found that what they call early ambulation — the prompt re-institution of maximum possible patient activity after surgery — produces better surgical results and fuller rehabilitation than did the time-honored "Oh, you poor dear" approach of a more benighted surgical era. Similarly, a psychiatric treatment program which does not baby the patient, but which does demand of him that he himself contribute as much as he can to his own treatment, has been demonstrated to have good results in the long run. But how do we keep periods of hospitalization to the essential minimum, and thereby avoid the barnacles? The staffs of our institutions are too few to move in promptly and incisively when a new patient is admitted. They cannot start intensive treatment promptly and soon discharge him.

To compound the problem, our staffs must use out-dated administrative practices which do not maximally utilize such staff time as is available. Care-taking facilities in the community are inadequate in quality, so that a patient who could have been cared for in the community must be hospitalized. Or a patient in the hospital who should return to the community must stay over-long in the hospital because he cannot find proper care in his home town. Hospital staff burden is increased because patients are unnecessarily admitted and inpatient census is therefore unnecessarily high. Institution staffs must divert to these others time and energies more properly applied to those patients who do need hospitalization.

Another practice which erodes effectiveness of staff and therefore unduly prolongs hospitalization is that of admitting persons who do not have primarily mental illness or mental retardation problems. Many old people with minor confusion or cantankerousness, people with terminal cancer, chronic neurological and other physical illness, people who prey upon society but have no substantial mental illness or retardation — all these find their way into the mental institutions when they more properly should go to rest homes, to institutions for the chronic physically ill, or to jail. Yet their presence in the mental institutions saps the energies of scarce staff and diverts those energies from mentally ill people. They should be maintained in facilities appropriate to their needs and not be maintained uncomfortably in mental institutions. *How, then, can we render unto Caesar that which is Caesar's?*

How can we provide continuity of care? Mental illness is not a light bulb which turns on or off. It is not a process which starts and then progresses steadily to a conclusion. It is not a thing which affects all patients the same way at the same time. No, mental illness tends to have its ups and downs, to demand first one kind of care at one time and another kind at another time. The patient in desperate need of inpatient care one week may need only an occasional outpatient treatment the next, but in a few months or years, desperately need temporary inpatient care again. When the care-taking facilities are fragmented; when the facility which offers him one kind of care is administratively and functionally separated from the facilities which offer him other kinds of care, his changing needs cannot be met promptly and appropriately. He will stay over-long in one kind of facility and be denied thereby what he really needs. Or he will be discharged from one facility while needing the ministrations of another facility, but he will fail to enter the needed facility. How, then, can we so organize our overall treatment resources that a patient can move smoothly and surely from one phase of treatment to another as his changing psychiatric condition requires?

Needs Realistic Appraisal

If our goal is only to treat our patients' mental illness, then we are demanding too little of ourselves. *How can we restore patients to maximal socio-economic function?* Of what real value is it to patient, family or community if a patient recovers from mental illness, but then fails to re-enter the

community as a functioning human being? We cannot be content with any goal save the maximum possible restoration of a given patient to function as a social and economic entity in his society. Obviously, a patient recovering from mental illness will not necessarily be able to function at a higher level than he did before he became sick. Not every recovered patient has the innate capacity to become president of a large corporation. He has only certain limited talents.

But plans should be made from the moment he is identified as a sick person for him to return to work and to participation in family, church, and other social activity of which he is logically capable. The plans should rest upon a realistic appraisal of his intellectual and personal limitations, and upon the extent to which his society will permit him to participate. But these are limitations which all of us have as we seek to play our own roles in our societies. We must see to it that it is these limitations, and not the fact of his having once been mentally ill or our over-protection of him, which determine the socio-economic levels to which he will rise.

At this point, lest our enthusiasm blind us to some of the harsh realities of this imperfect universe in which we live, we should pause to remember that not all persons with mental illness recover fully from their illnesses. Many of them develop a smoldering and chronic disorder. And, of course, mentally retarded persons are likely to continue to be retarded throughout their lives.

The fact is that psychiatry and the rest of medicine have not yet developed the capacity to cure everyone; there will be for a long time many people who have improved, but who have not been cured. What shall we do about these people who still have lingering effects of their illness, but for whom we can do little more that one can do, say, for a patient with diabetes under reasonably good control?

Custodial Care

In the past, we have held such partially recovered people in our institutions. We have thought it simpler thereby to keep track of them and to give them such care and treatment as they can use. By this practice we have kept them off the streets, so that the public at large did not have to tolerate their idiosyncrasies of behavior. Our institutions therefore have not been publicly criticized for releasing to the community someone who commits a crime or otherwise excites public anxieties and anger.

The fact is, studies show, that former mental hospital patients have a lower crime rate than do other persons, but public fears, curiously, are more readily aroused by a crime committed by a former patient than by one committed by someone not so identified. So, in the past we have taken the easy way and simply kept such persons locked up, even though they could have functioned quite adequately and safely — with very few exceptions — in their home towns.

If we can safely assume, then, that it is unnecessary, indeed noxious, and certainly inhumane, to sentence these people to a living death, we must find answers to the question: *How can chronically and untreatably ill people live in their own home towns?*

We come now to the last question: *How can state, county and city share the financial burden amicably?*

This is a most important question, for its implications affect every question we have already raised. So long as these three major political units seek to foist upon one another the burden of providing psychiatric care, schisms and chasms will be created and maintained which will disrupt, fragment and vitiate Indiana's treatment program. The origins of this familiar conflict among city, county and state are easy to understand. The citizens of a given political entity simultaneously make two quite incompatible demands upon their elected officials; that is, they demand their government provide ever-increasing services and at the same time they demand ever-lowering taxes.

The conscientious public official, therefore, who is responsive to the needs and demands of the citizens, is in an impossible position. If he does indeed provide the better streets and highways, parks, police protection, health and welfare, and sanitation which the citizens demand, then he must also provide the ways and means of paying for those services. But if he increases taxes as the logical and equitable way of providing the ways and means, he is criticized shrilly and doubts are raised as to his competence, or his integrity, or both. He would be rather more than human, therefore, if he did not look to another taxing unit for the funds to provide the demanded services.

If the citizens of a given county receive their psychiatric services at state expense, then the cost of those services does not have to be reflected in county levies. If, *mirabile dictu*, Federal monies can be tapped for the purpose, then the onus of taxation can be displaced all the way to Washington and laid at the doorstep of the Internal Revenue Service — which isn't very popular anyhow.

Nevertheless, even though one can perhaps understand why the various political units seek to shift the financial burden of the mental care program onto one another, one cannot ignore the fact that this contentiousness both disrupts and weakens the care program and unnecessarily raises its overall cost. Whether or not the system of care is fragmented, it is nonetheless a system. And it is a system which costs more for poor service than would a good system which was better integrated. And all that cost comes, at last, from one and the same taxpayer's pocket.

Conscientious Cooperation

Sharing the financial burden amicably among the state, county and city, therefore, would have more important benefits than just reducing hard feelings. It would facilitate the design and operation of truly continuous systems

which provide continuity of care. It would accelerate the flow of patients from one setting to another as their therapeutic needs change. It would both eliminate costly duplication of effort and close gaps in the treating spectrum. It would assure the more profitable use of scarce mental health professional personnel. In short, it would provide more and better treatment at less cost per improved patient.

Now, we should not finish this black picture without recognizing that rays of light are beginning to penetrate the murk. I have emphasized the many problems and questions which lie ahead of us, because questions properly command our attention. But had there not already been progress in this matter — had Indiana people not been ready to face problems and to seek solutions — then the picture would be terribly black. The fact is that Indiana has not ignored its many problems; Indiana has not been insensitive to the suffering of its mentally ill and mentally retarded citizens. The very existence of citizens' organizations addressed to these problems is evidence that Indiana is concerned. The presence of mental health committees in state and county medical societies attests to this concern. The millions of dollars Indiana appropriates to this purpose each year is such testimony. The many community mental health facilities which are springing up throughout the state show the citizen's readiness to match talk with action.

The situation, then, is far from hopeless. Throughout the state — in every county and in every social and economic level — are men of good will who are investing their genius and their energies in the efforts to answer these questions and to solve these problems. We must continue to develop the machinery whereby we can combine our efforts and, by supplementing and supporting one another, forge a whole that will be greater than its parts. We must also provide the forums wherein those of us who differ with one another on given policies and issues can debate those differences fully. In these forums, let the inept or unsound policy or assumption be hammered down by debate; and let the apt and sound policy or assumption demonstrate its validity by virtue of the very strength of the attacks which it has withstood.

Such a process of cooperation and sincere debate will surely produce profound changes in the structures and facilities which presently exist in Indiana. And those changes will as surely produce anxieties, exasperations, frustrations and hostilities. But as the smoke clears from time to time, we may be able to snatch a momentary gratification from a recognized achievement as we immerse ourselves in the problems once more. ◄



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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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Marion County Association for Retarded Children Announces Expansion of Services

THE program of the Marion County Association for Retarded Children has been expanded to include day-care programming for pre-schoolers (age 2+) through adulthood. The Association offers a nursery school (half-day) program, all-day primary and intermediate classes, an activity center for 14-16 year olds and a sheltered workshop for mentally retarded adults. The latter is at 752 E. Market St., Indianapolis, and a listing of addresses of locations for children appears below.

The expansion of services has not only been in the number of locations available, and in the number of teachers and class aids, but also in service to the more severely retarded child and adult. The Association is also able to serve the retarded who are multiply handicapped—those who are crippled, brain-damaged, have other sensory defects, those still not toilet-trained or who are in wheel chairs.

Care for the mentally retarded child or adult (for those parents who wish it) is provided by a day-care facility which will stimulate, encourage, and, where possible, instruct the retarded so that they may reach their realistic potential. A remaining problem has been the provision of transportation for all the children and adults needing day-care programs; *some* transportation is available at the present for those in Marion County.

A new source of tax-funding has recently enabled the Association to reduce fees in line with parents' ability to pay. Staff expansion in social service, teaching and recreation departments has led to a total of 36 professional staff, plus 28 non-professional, serving a total of 240 families in the day-care programs, and hundreds of other families in case work and recreational services. Expansion to serve many more families is planned by September of 1967.

Further information may be obtained by telephoning Mrs. Jacqueline Berns, 924-1306, Indianapolis, or by writing Mr. G. Linden Thorn, 33 E. 39th St., Indianapolis 46205.

Children's Services

Noble School, 615 *W. 43rd St., Indianapolis.*

Ages 4-7

2 Pre-school classes—½ day

Ages 7-10

2 Primary Handicapped—½ day

Ages 10-14

1 Intermediate, Home Arts—Full Day

1 Intermediate, Activity—Full Day

1 Adult Handicapped—Full Day

Fountain Square, 1301 *Prospect, Indianapolis.*

Ages 7-10

1 Primary—Full Day

Ages 10-14

1 Intermediate, Home Arts—Full Day

Beech Grove, 229 *S. Third Ave., Beech Grove, Ind.*

Ages 4-7

1 Pre-school class—½ day

Ages 7-10

1 Primary—Full Day

North East (Prentice Presbyterian), 4900 *E. 38th St., Indianapolis*

Ages 4-7

2 Pre-school classes—½ day

Ages 7-10

1 Primary—Full Day

Speedway (St. Andrew's Lutheran), 5700 *Crawfordsville Rd., Indianapolis.*

Ages 4-7

2 Pre-school classes—½ day

Ages 7-10

1 Primary—Full Day

Broadway (Christian Center), 1654 *Broadway, Indianapolis.*

Ages 7-10

1 Primary—Full Day

Ages 10-14

1 Intermediate, Activity—Full Day

Valley Mills (Friends Church), *Thompson Rd., Valley Mills, Ind.*

Ages 4-7

2 Pre-school classes—½ day

Ages 10-14

1 Intermediate, Activity—Full Day ◄

Future in Medical Care Gets Emphasis in ISMA Meeting

THE second annual "Medicine and Voluntary Health Day" will be held at 9:00 a.m. Wednesday, April 26 at the Howard Johnson Motor Lodge, Washington and West Streets, Indianapolis.

The program, initiated last year by the Commission on Voluntary Health Agencies, and those health agencies in Indiana who have met the criteria of the commission, was termed successful by the Indiana House of Delegates of the association and the participating agencies. Approximately 500 persons attended.

Dr. Norman Booher, chairman of the commission, points out that this year's program will encompass the growing problem of lack of personnel in the medical and allied health fields as it affects the increasing demands of patient care, and new concepts in medical education and patient care with emphasis on the use of computers.

The program will also incorporate a discussion of the future role of the practicing physician as outlined in the Millis Report, a report made to the American Medical Association's House of Delegates in Las Vegas.

It's the commission's hope and the hope of Dr. E. S. Rifner, president of the association, that as many ISMA members as possible will attend this cooperative program held in conjunction with the two-day Indiana Public Health Association meeting.

Following is an outline of the program:

Medicine and Voluntary Health Day

9:00 A.M. *Medicine and Voluntary Health Day*
Presiding:
Norman Booher, M.D.
Chairman, Commission on Voluntary Health Agencies, Indiana State Medical Association

9:10 A.M. *Medical Education in The Future — A Review of the Report*
Leonard W. Larson, M.D.
Bismarck, North Dakota
Past-president, American Medical Association
Member, Citizens Commission on Graduate Medical Education

9:40 A.M. *Changing Personnel in Health Care*
Mr. John Mote
Indianapolis, Indiana
Assistant Director, Methodist Hospital Personnel & Education

10:00 A.M. *The Use of the Computer System in the Indiana Plan of Postgraduate Education*
George T. Lukemeyer, M.D.
Indianapolis, Indiana
Associate Dean of Postgraduate & Continuing Medical Education, Indiana University School of Medicine

10:40 A.M. *The Computer System in Medicine*
Richard D. Yoder, M.D.
New Orleans, Louisiana
Assistant Director, Bio-Medical Computers Center, Tulane University

11:10 A.M. Questions and Answers

11:45 A.M. Adjourn

Serving on the planning committee for the affair are Mr. William C. Wilson, Indiana Tuberculosis Association; Mr. Earl B. Beagle, Indiana Heart Association; Mrs. Robert J. Shultz, National Multiple Sclerosis Society and ISMA commission members, Drs. James Gosman, Wendell Ayres and Norman Booher. ◀

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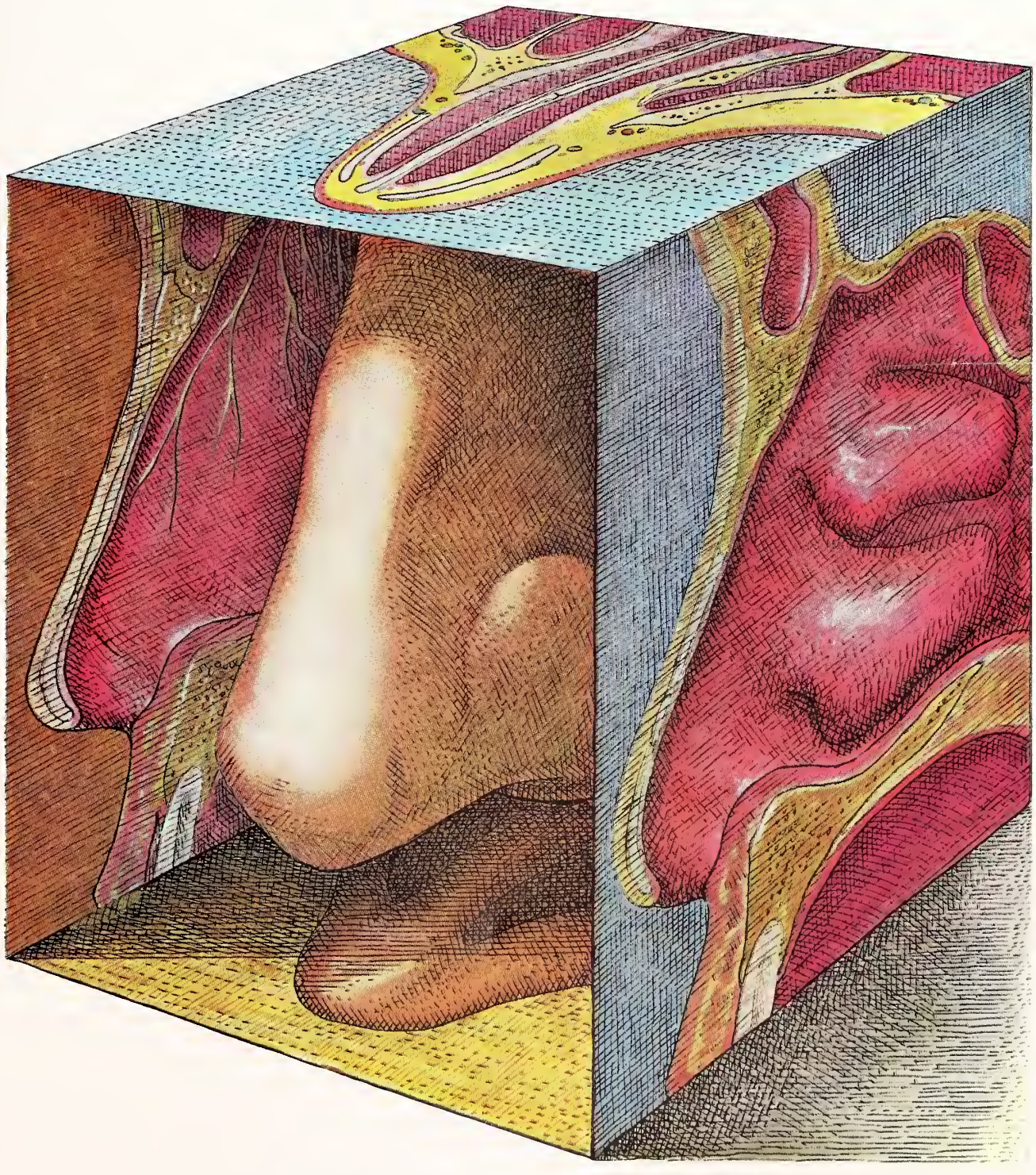
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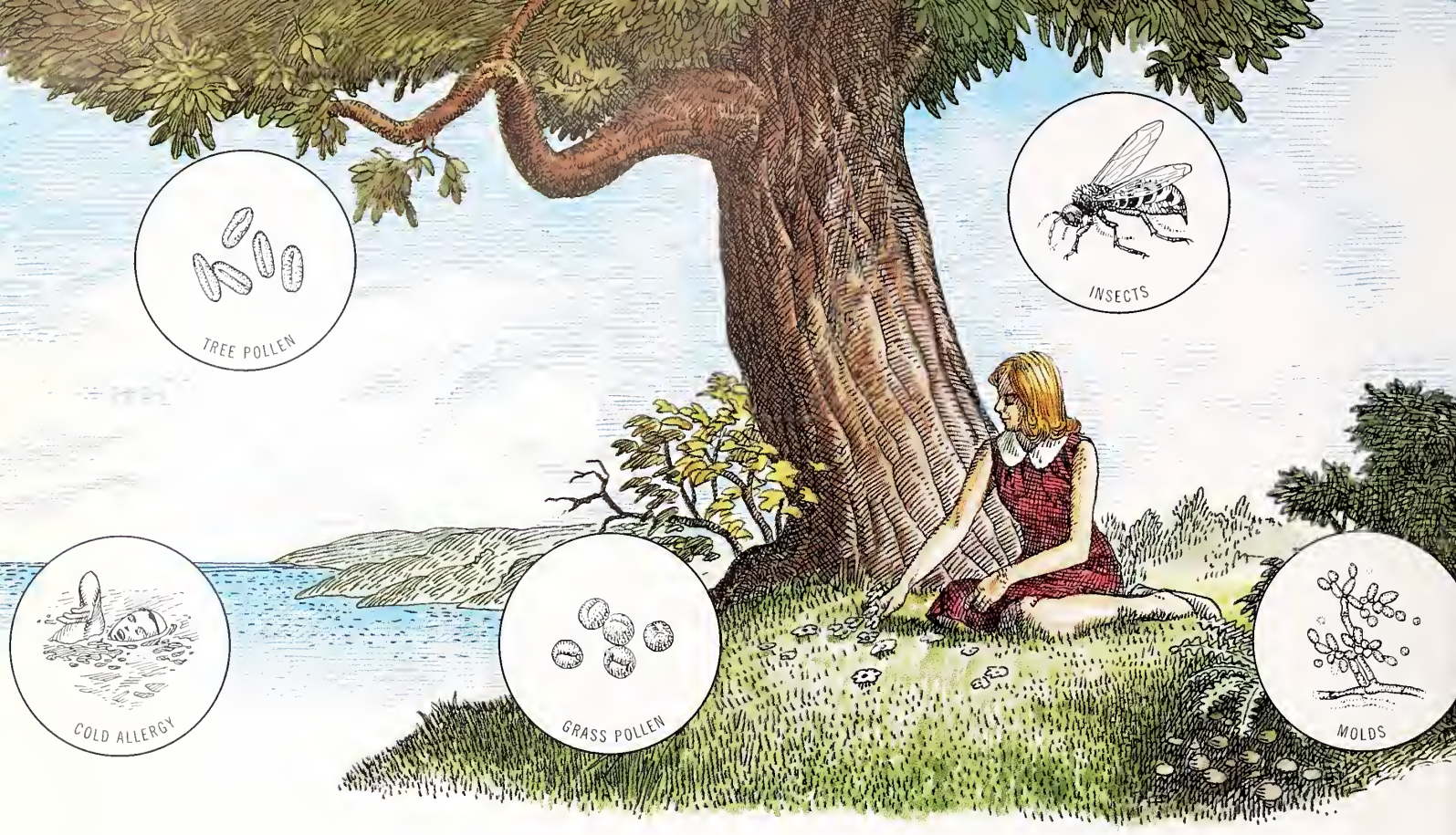
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Season

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this issue: the ubiquitous world of summer allergies



the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

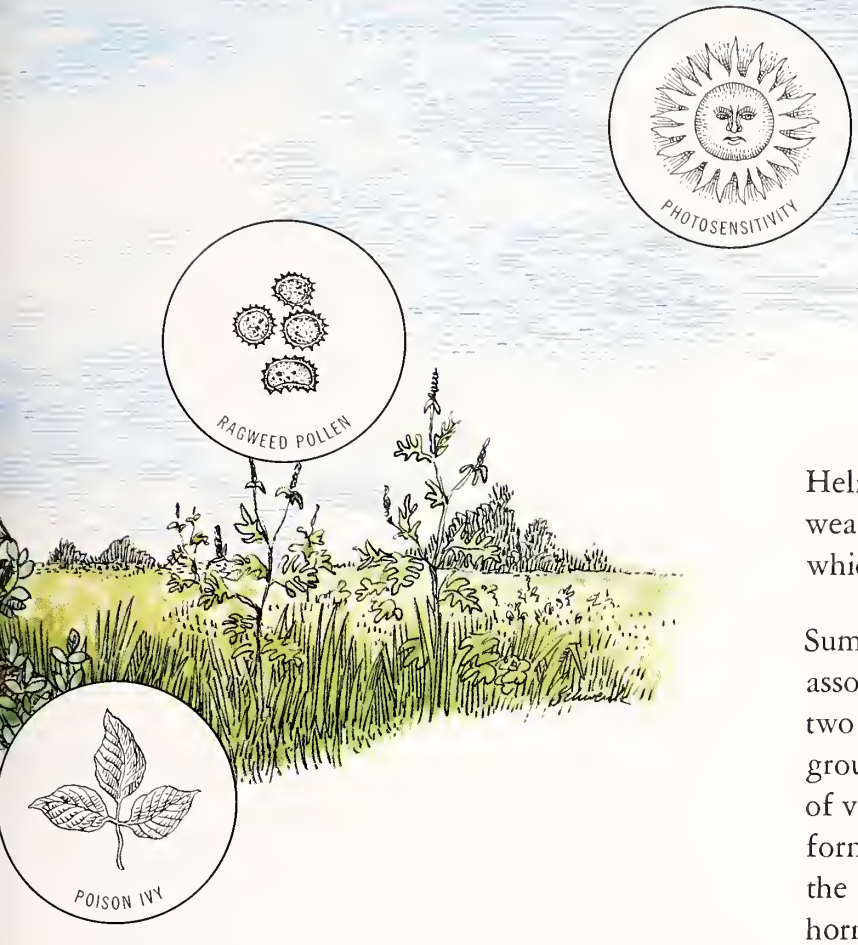
In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.[1] The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.[2] The entire tree season starts about April 1 and ends about Memorial Day, although all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.[3] Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.[4]

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is Alternaria—the kingpin of the molds—that meets a sudden demise with the first frost. Alternaria-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, Alternaria counts are at their highest, perhaps associated with the burning of leaves. Other molds such as Hormodendrum and Helminthosporium are associated with the warmer weather, as opposed to Penicillium and Aspergillus which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.[5] Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.[6] Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

to relieve summer allergies

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

Another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.[7] Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.[8] It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

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Side effects: Occasional drowsiness, blurred vision, cardiac palpitation, flushing, dizziness, nervousness or gastrointestinal upsets.

Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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A Report on the Battered Child* Indiana, 1966

ALVIN S. BYNUM, CONSULTANT,
CHILDREN'S DIVISION
Department of Public Welfare,
State of Indiana

AFTER a year's in-depth study of the battered child in Indiana, a law was developed and passed in the General Assembly on March 11, 1965.† It gave certain protection to physicians and other persons who recognized the syndrome and reported same to the proper authority. The county departments are reporting the incidents monthly to the State Department of Public Welfare on Page 2 of Department of Public Welfare Form 135 which gives the basis for this report:

During the 12 months of 1966, there were 50 of the 92 counties reporting at least one suspected battered child. The highest incidence was in Madison County where 19 cases were reported. The second highest was Wayne County with 18, Marion and St. Joseph counties ranked third with 15 each.

The total reported for the period was 242 with 139 boys and 84 girls listed. Since the first name was the only information on the report to indicate sex, there were 19 other children whose names could have been boys or girls. It was impossible to determine the average age of the children involved, as this was not requested on the report form.

Of the cases received for study by the county departments, only 11 were dropped after the first interview, and 167 were found serious enough to report them to the county prosecutor for further investigation or action. The county departments retained 125 cases at home for service and rejected 52 as showing "no evidence of abuse."

In disposing of cases, the courts saw fit to make 117 of the children public wards and place them in foster homes. The remaining children were released to their parents or other responsible guardians.

The tabulation is not complete on the sources of referral, but earlier figures indicate that physicians, both private and hospital-based, are reporting the syndrome in larger numbers. It was significant to note, too, that the school social worker and school nurses also played an important role in making reports. In this regard, the caseworker who acts upon one of these cases in good faith enjoys the protection of the law the same as medical and para-medical personnel would enjoy.

It is evident from this study that a broader educational program is needed to inform the many groups of people who might be at some time affected by an incident of an abused child.

County departments will receive shortly from the Central Registry, which has just been established in the state department, specific instructions for reporting and for receiving consultation in abused child cases. The procedure, as outlined by the Central Registry, will greatly simplify and improve the efficiency of getting into action the child protective services of the state. ◄

* Reprinted from the *Newsletter* of the Indiana Department of Public Welfare by permission of Albert Kelly, administrator.

† See *JISMA*, 58:350, April, 1965 for a summary of the act.

AMA Chiropractic Policy

The American Medical Association has adopted an official policy on chiropractic.

The statement, initiated by the Committee on Quackery and presented by the Board of Directors, was adopted unanimously by the House of Delegates at the Clinical Convention in November, 1966.

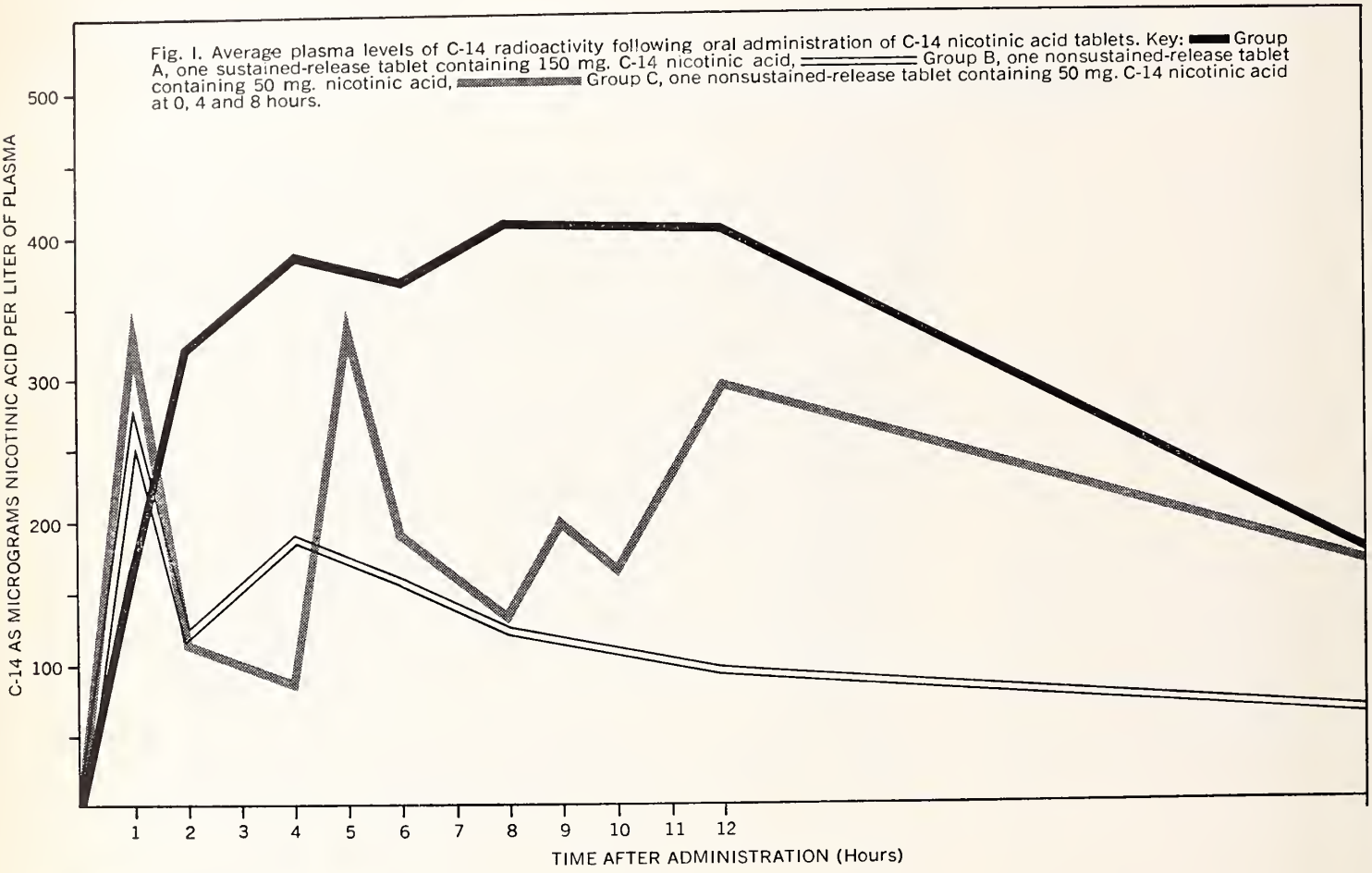
The official policy of medicine on chiropractic states: "It is the position of the medical profession that chiropractic is an unscientific cult whose practitioners lack the necessary training and background to diagnose and treat human disease. Chiropractic constitutes a hazard to rational health care in the United States because of the substandard and unscientific education of its practitioners and their rigid adherence to an irrational, unscientific approach to disease causation.

"In 1965, a United States District Court, in upholding a state's constitutional right to refuse to license chiropractors, said that 'since chiropractic claims to be a complete and independent healing art capable of curing almost all kinds of disease, the state Legislature may have felt that the requirement of a foundation in materia medica and surgery . . . would be a protection to the public.' Without dissent, the United States Supreme Court affirmed the decision.

"The wisdom of these decisions by the nation's highest courts justifies the medical profession's educational program of alerting the nation to the public health threat posed by the cult of chiropractic.

"Patients should entrust their health care only to those who have a broad scientific knowledge of diseases and ailments of all kinds, and who are capable of diagnosing and treating them with all the resources of modern medicine. The delay of proper medical care caused by chiropractors and their opposition to the many scientific advances in modern medicine, such as life-saving vaccines, often ends with tragic results."

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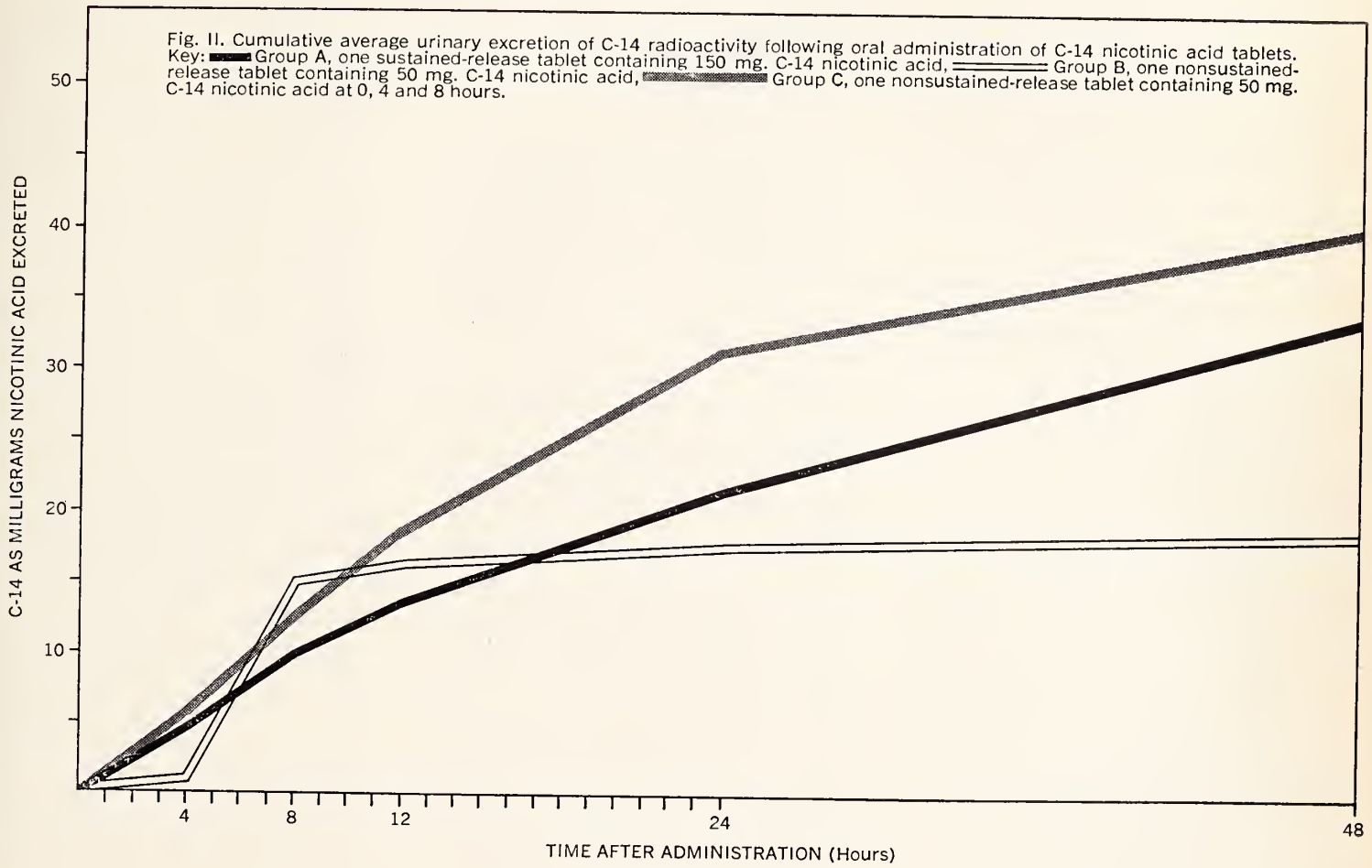
Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilatation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also, cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate, signs of senile confusion. Patients become more alert,

aged and debilitated



less confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

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Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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News from Indiana University School of Medicine

PARENTS of 80 members of the entering class of the Indiana University School of Medicine last fall were business executives or independent small business men, 25 of the class came from Lake County and 23 were women.

The majority of the class members were 21 and 22 years of age, and 46 were married, including one married couple both of whom are enrolled in the combined degree program in Bloomington.

The analysis of the 216 members of the freshman class was made by Dr. John J. Mahoney, associate dean of the school.

"Only 24 of the entering class were the sons of physicians," Dr. Mahoney pointed out. "This is interesting," he said, "since there seems to be a generally held opinion that it is necessary to be the son of a doctor to get into medical school."

Approximately 90% of the beginning students are Hoosiers, representing 53 counties and 19 Indiana schools as well as 19 schools outside the state. Of the Indiana schools, the largest number came from Indiana University, followed by Purdue, DePauw, Wabash, Manchester, Hanover and Indiana State.

Marion County, the home of the school of medicine, and with the largest population in the state, has 37 students in the freshman class. Second largest representation comes from Lake County. Next after Lake, Allen and Vanderburgh counties are tied with 11 students each.

Twenty-three fathers of entering students hold jobs in the skilled trades, almost equaling the physician-father group. Next down the list are laborers (16) and sales and clerical workers (15).

Last in line were the children of college faculty members (3). Other parents listed included school teachers. engineers, farmers, government service workers, miscellaneous professional, health professions, ministers, pharmacists and attorneys.

A total of 1,019 students applied for the 216 places in the class, Dr. Mahoney said. Of these, 398 applicants were from Indiana and 621 were non-residents. Twenty-three of those accepted were non-residents—they came from 10 other states and three foreign countries. It also happens that 23 of the freshman class are women, one of the largest groups of women in an entering class in recent years.

An average of approximately 50 Indiana students have entered medical schools in other states in previous years.

Another factor that should be of interest to undergraduate students, Dr. Mahoney said, is that only 29 of the entering students were "pre-med" majors as such. True, 57 majored in chemistry as undergraduates, 55 in zoology and 40 in biology. On the other hand, two majored in business and there was one each in the fields of commerce, economics, engineering, English, Spanish, geology, history, mathematics, physical education and physics. Others majored in anatomy-physiology, pharmacy, psychology, chemistry-biology, veterinary medicine and optometry.

The Indiana University School of Medicine enrolls more medical students than any other school in the United States (816 counting the combined degree program in Bloomington). For the school year 1965-66, figures just released by the Council on Medical Education of the American Medical Association show that the entering students at I.U. represented 2.4% of all the beginning medical students in the United States (both publicly and privately supported), which exactly matches Indiana's proportion of the total U.S. population.

In addition to medical students, the I.U. School of Medicine has enrolled 193 students this year in the allied health sciences, 133 graduate students in the basic biological sciences, 44 hospital interns, 200 hospital residents, 24 dietetic interns, 15 clinical fellows and three pastoral trainees. ◄

Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

Acidosis in Myocardial Infarction of Serious Import

Fifty patients who had sustained acute myocardial infarctions had acid-base studies performed to investigate the incidence and degree of metabolic acidosis. Neaverson,[1] who reports these cases, found that 66% of the patients developed a significant degree of acidosis. Thirteen of the 50 patients died, and 12 of these were in the group with acidosis. The author also reports that correction of the acidosis (intravenous sodium bicarbonate was used) caused a rise in blood pressure in 12 patients from shock levels. The author states that in his series a significant base deficit that occurred within 12 hours of a mycardial infarction carried a 28% mortality rate, and such a dangerous prognostic value that prompt attempts should be made to correct it.

Alcohol Ingestion—Pain—Neoplasm Syndrome

Most senior medical students reply "Hodgkin's disease" when someone says "pain after alcohol ingestion," and this is still quite appropriate. However, Brewin[2] reports that there are a large number of other neoplasms which may cause this same manifestation. He reports 155 such patients. Of this group, only 60 had Hodgkin's disease; 24 had other lymphomata. The other patients were found to have tumors of various organs, with carcinoma of the cervix being the most frequent. It should be noted, parenthetically, that three of the tumors were benign. The author notes that alcohol intolerance may be an early manifestation of malignancy and that it may respond favorably to radiation therapy, cytotoxic drugs, antihistamines, corticosteroids or phenylbutazone.

Are Inflatable Plastic Splints Total Tourniquets?

The relatively new, inflatable plastic splints which have been praised for their ease of use, storage and effectiveness have been reported by Ashton to be not without potential danger.[3] These splints were placed on the upper and lower extremities of 15 normal subjects and inflated to a pressure of 40 mm. of mercury. Blood flow in the subjects was measured before, during and after application of the splint. In all subjects there was a rather striking reduction of flow during splint inflation, and in six subjects there was complete cessation of blood flow. The author points out that inflation to only 30 mm. of mercury does not produce nearly as striking a flow reduction, but of course, the amount of splinting provided is considerably less with the lower pressure. Neither the author nor this reviewer are aware of case reports of clinical damage from these splints, but this report should make us aware of potential hazards.

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2. Brewin, T. B.: Alcohol Intolerance in Neoplastic Disease, *Brit. Med. J.* 5511:437-441.
3. Ashton, Heather: Effect of Inflatable Plastic Splints on Blood Flow, *Brit. Med. J.* 5527:1427-1430. ◄

Rx Generic—False Economy

Regardless of the criticisms that fall our lot, it is the physician's responsibility to prescribe those medications which will most effectively aid in the recovery of the patient. This responsibility cannot be delegated to any politician, government official, or pharmacist.

If he can minimize the injury to the patient's pocketbook, this is desirable. However, it is false economy to prescribe a drug under its generic name if there is reasonable doubt about the clinical acceptability and effectiveness of the brand that will then be dispensed by the pharmacist. — William M. Straight, M.D., in *Bulletin* of Dade County (Fla.) Medical Association, (36:21-22), April 4, 1966.

Live and Learn with New Drugs

There is no simple answer to the question "How Safe are Drugs?" The effective drugs available today have varying degrees of potentiality for producing harmful effects. Can drugs be developed with such specificity of action that all effects but the one desired would be eliminated? This is something to hope for but the reactive mechanisms of the body may also have limits of specificity.

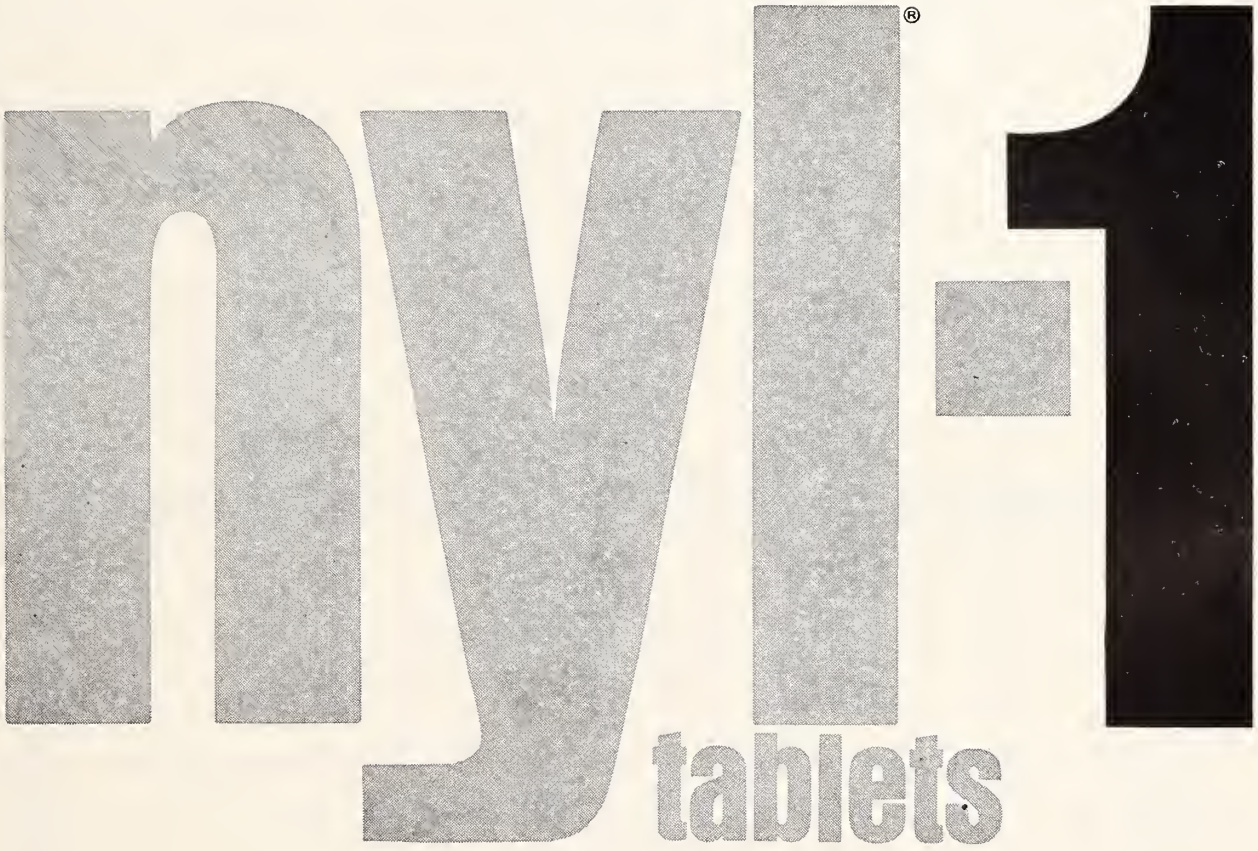
If we have to live with new drugs which occasionally produce adverse effects, less trouble will occur if the physician uses them wisely. He can do this only by learning as much as possible about them before he prescribes them and then passing along any additional information gained from his own experience. — Ralph G. Smith, M.D., in *Journal of New Drugs*, (6:62-68), January-February, 1966.

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The Cancer You View

DISCUSSION

The history of a pigmented lesion or mole, which is easily traumatized, subsequently fails to heal and proceeds to enlarge, immediately arouses the clinical suspicion of a change in a pigmented nevus to a malignant melanoma. The upper part of the illustrated lesion is irregular, somewhat variably pigmented and relatively flat. The darker, ulcerated, raised nodule is the area of malignant melanoma.

General rules or guides for surgical removal and histologic examination of pigmented skin lesions are as follows[1]:

1. All pigmented lesions of the soles of the feet, palms of the hands and genitalia.
2. All ulcerated pigmented lesions.
3. Those pigmented lesions which are subject to chronic irritation by reason of their anatomic location.
4. Pigmented lesions with irregular borders, pigmented finger-like projections or with accompanying satellitosis.
5. Pigmented lesions which have shown an increase in pigmentation or size, or a decrease in hairiness or which are accompanied by the appearance of unexplained regional lymphadenopathy.

Diagnosis and therapy are usually combined for benign pigmented nevi, in that excisional biopsy is best employed for both purposes. The only exception is for large pigmented lesions or bathing-trunk nevi, when incisional biopsy is performed in suspicious areas.

With clinical features suggesting malignancy, the excisional biopsy may be used with the cooperation of the pathologist for frozen section diagnosis or for routine pathologic diagnosis. However, if verified as a malignant melanoma, excisional margins of skin free of pigmentation should be at least 2.5 cm wide. Re-excision, of course, should encompass the entire depth of the previous excisional biopsy site. The location of the lesion may necessitate skin grafting procedures for repair. Local recurrences are often new junctional nevi or melanomata. New lesions of premalignant or malignant nature may appear elsewhere on the body, thus requiring continuing follow-up for the life of the patient.

The question of prophylactic regional node dissection has been variously decided by different authorities. It is felt that only in instances of clear-cut lymphatic drainage to one surgically accessible area should consideration of this radical surgery be entertained. If clinically suspicious enlarged nodes are present, then of course, a regional lymphadenectomy in that area should be performed. In patients with advanced disease and distant metastases, local surgical excision of the primary and bothersome metastases may prove palliative and psychologically beneficial. Appropriate chemotherapy administered systemically or by various technics of regional infusion by experienced physicians may be of palliative benefit.

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★

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Blue Shield—Roots in the Community

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One of the earliest goals of these Blue Shield Plans was to make medical care available to everyone in the community — not just to those who were young and healthy.

Blue Shield laid aside many cherished insurance concepts by enrolling small groups and by charging equal premiums for everyone in the community without considering the variations in risk.

As a matter of fact, the young and healthy actually shared the cost of health care for the old and ill. In this fashion, the subscribers who needed medical service the most were being helped by members who did not require as much medical care.

This technique came to be known as "community rating," because it was in fact charged for, or rated, on the basis of the whole community's experience.

But as Blue Shield gained experience, the commercial insurance carriers began to realize that there was a market for health insurance. They started offering coverage at a rate that was based on how much health care each group used. This is called "experience rating" which presents certain advantages to large, low-risk groups.

In the face of this competition, most Blue Shield Plans turned to a modified form of community rating called "merit rating."

In a merit rating system, the principle of community rating is applied to each group rather than to the entire community. Each group thus is charged according to the amount of health care it utilizes. Those who do not belong to a group are enrolled with other non-group subscribers and charged a premium based upon the amount of medical-surgical care they use.

Such a rating system still preserves the basic Blue Shield philosophy of helping everyone in the community — not just those who are young and healthy.

Blue Shield and the medical profession still feel a real responsibility to help solve social and economic problems by voluntary means. ◀

W. C. Huddlestone
Communications Division

Adverse Reaction—Coincidental or Causal?

Thus we see that panic, misinterpretation, or just plain ignorance still form the basis of judgments about the safety of our newer drugs.

Clinicians are still not used to thinking in terms of the huge number of individuals taking a particular drug. and the opportunity this affords for coincidental events which may be mistaken for causal relationships.

If physicians do not keep this inevitable possibility in mind, they may end up treating coincidences instead of patients — an occupation of doubtful utility and poor prognosis. — Joseph W. Goldzieher, M.D., in *Texas State Journal of Medicine*, (62:37), May 1966.

WANTED: Physicians Locations

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Ronald H. Seheeringa, 628 22nd Ave., N., Texas City, Texas 77590—*Internal Medicine*

Stanley Luftsehein, 3rd H. U., 45th Field Hospital, APO New York 09019—*Internal Medicine*

Theodore E. Bleeher, Haematology Dept., Royal Infirmary, Bristol, 2, England—*Internal Medicine—Hematology*

Charles S. Dreseher, 2nd General Hospital, APO New York 09180—*Orthopedics*

Robert J. Warren, 2932 Applewood Ct., N. E., Atlanta, Ga.—*Pediatrics*

Andrew H. Kilgus, Quarters 2 - 31, West Point, New York 10996—*Pediatrics*

John A. Anderson, 7 Wood Rd., Middletown, Rhode Island 02843—*Pediatrics*

Russell Noyes, Jr., 1251 Melrose Ave., Iowa City, Iowa—*Psychiatry*

Bertil Roseberg, 605 Garfield Ave., Rockford, Ill. 61103—*Radiology*

Agustin M. Ruiz, 8574 E. Eleven Mile Rd., Centerline, Mich. 48015—*Radiology*

William E. Beaven, 4221 58th Ave., Bladensburg, Md.—*General Surgery*

Jerome H. Brodish, 510 W. Cardinal St., Siler City, North Carolina 27344—*General Surgery*

James E. Keasling, 3027 Jillegass Ave., Berkeley, Calif. 94705—*General Surgery*

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

South African Physician Convicted of Culpable Homicide for Patient's Death from Transfusion Intended for Another—A physician was properly convicted of culpable homicide for having caused the death of a hospital patient by giving her a blood transfusion that had been ordered for another patient having the same surname, the Supreme Court of South Africa, Transvaal Provincial Division, ruled.

E. van Vuuren and H. van Vuuren were patients of the same gynecologist, and both had undergone hysterectomies. E. van Vuuren was in section 1 of the hospital and H. van Vuuren was in section 8. The gynecologist ordered a blood transfusion for E. van Vuuren. The gynecologist's name, the name E. van Vuuren, and the location of section 1 were put on the requisition and the identification tag on the bottle of blood furnished to the physician for use in the transfusion.

When he arrived at the hospital, the physician went to the reception desk and asked where Mrs. van Vuuren was. The clerk looked at his card file and asked the physician if he was looking for Mrs. H. van Vuuren. When the physician said that he was looking for Mrs. E. van Vuuren, the clerk checked the file again and told him that Mrs. E. van Vuuren was in section 8.

When he arrived in section 8, he was directed to the bed of Mrs. H. van Vuuren where the nurse was checking the patient's blood pressure. The nurse replied in the affirmative when the physician asked if the patient was Mrs. van Vuuren, the gynecologist's patient. The nurse testified that she told the physician that no transfusion had been ordered for the patient. In view of the generally unsatisfactory character of the nurse's testimony, it is not certain that the physician was given any such warning. However, it was not disputed that the physician did not question the patient or check her bed chart to confirm that the patient was the one for whom the transfusion was intended. The physician started the transfusion and left. The gynecologist arrived a short time later, stopped the transfusion and corrected the damage caused by the transfusion of incompatible blood. However, a wrong diagnosis that the patient was bleeding internally was made, and she was given a further transfusion under pressure. This led to an overload on the patient's heart, and she died of heart failure.

The physician knew the extreme importance of not making any mistake in the identity of the person to whom a transfusion is given. As a result of his conversation with the clerk at the reception desk, the physician should have been alerted to the danger of a possible mistake of identity and should have taken steps to guard against the danger. Under the circumstances, the physician was negligent in proceeding solely on the basis of the nurse's identification of the patient. He should have taken one or more of the following steps to check the patient's identity. He should have asked the patient to identify herself. Although there was a conflict in the evidence as to the patient's condition and her ability to identify herself, it would appear that her condition was such that she could have answered, with a movement of her head, the question, "Are you Mrs. Engela van Vuuren?" He should have checked the patient's bed chart. It would have informed him of the patient's name and what treatment she was to receive. Or he should have checked with the nurse to make sure that a transfusion had been ordered for the patient to whom he proposed to administer one.

Berman v. State (Union of South Africa, Transvaal Province, Sept. 26, 1966).

Damages of $175,000 *Awarded for Injuries Caused By Staph. Infection*—A patient was awarded damages of $175,000 by a federal trial court in her suit against the government for injuries resulting from a Staph. infection contracted while she was being cared for in the premature nursery of a Navy hospital.

The patient is now four years old and has a life expectancy of 65.10 years. She suffers from limitation of motion in both arms, walks with a noticeable "swayback" and drags her right leg. The limitation of motion of her arms will probably not change. However, the condition of her hips and legs will most probably become worse, and further surgery will probably be necessary in later years. The patient will undoubtedly suffer some psychological damage. Her employment opportunities in later life will be limited. There will be future physical pain and mental anxiety.

Kapuchinsky v. U.S., 259 F. Supp. 1 (D.C., S.C., Oct. 4, 1966).

Hospital, Anesthesia Equipment Installer, and Parts Supplier Liable for Patient's Death—A hospital, the installer of the hospital's anesthesia equipment, and the supplier of parts used in installing the equipment were held liable for the death of a patient, as the result of being administered nitrous oxide instead of oxygen, by a Connecticut trial court jury.

A janitor employed by the hospital assisted in installing the gas pipes on the equipment. He found that a bushing furnished by the supplier would not fit on the nitrous oxide connection, but would fit on the oxygen connection. He informed the installer and was told to put the bushing on the oxygen connection. The result was that the nitrous oxide tank was connected to an oxygen outlet. Because of this error, nitrous oxide was administered to the patient when she should have received oxygen.

The jury awarded damages of $150,000. The hospital, the equipment installer, and the parts supplier have announced their intention to appeal. (News Release, Greenwich, Conn., Oct. 25, 1966).

State Liable for Patient's Detention in Mental Hospital—A patient was entitled to recover damages in a suit against the state for injuries resulting from his detention, as an insane person, in a state mental hospital as the result of negligence on the part of hospital physicians and employees, the New York Court of Claims ruled.

Following his arrest on a charge of assault, the patient was committed to the hospital until he was no longer in such a state of insanity as to be incapable of understanding and making a defense to the charge against him. After three unsuccessful habeas corpus proceedings, the patient was finally able to produce evidence that established as facts certain things which the hospital authorities had always previously regarded as delusions on the part of the patient. He was then released from the hospital.

The evidence was sufficient to establish that the hospital physicians and employees were negligent in that they failed to get a complete and proper history of the patient and the circumstances of his commitment, failed to tell him that the principal basis for his continued detention was their disbelief of the situation which he eventually proved to be true, and that they based their diagnosis and, thus, his continued detention on insufficient facts. This negligence did not constitute an error of medical or professional judgment for which the state would be exempt from liability, the court said. The state has the same liability for negligence as a private individual or corporation does, even though the negligent employee is a physician.

Rosario v. State of New York, 274 N.Y.S.2d 81 (N.Y., Sept. 30, 1966).

Private Hospital's Refusal to Renew Physician's Staff Privileges Upheld—A physician was not entitled, in a declaratory judgment action against a private hospital which had refused to renew her staff privileges, to an order entitling her to use the hospital facilities and to admit her patients thereto, a New York trial court ruled.

The physician had been a member of the hospital's active staff for several years, but she had not been extended surgical privileges. However, she was allowed to perform surgery, if she obtained the prior approval of the head of surgery and a senior surgeon or associate surgeon was in attendance. During the time she was on the staff, the physician was censured twice, once for the alleged abandonment of a patient and once for treating a gunshot wound under local anesthesia. Her conduct on the two occasions clearly violated the hospital bylaws. On another occasion, the physician took two fracture patients out of the hospital emergency room for treatment in her own office. It was claimed that, on another occasion, she operated to remove a bullet, without making any attempt to obtain the assistance of a surgeon. The operation was performed under local anesthesia. As a result of these last two incidents, a hearing was held by the Executive Committee of the Board of Directors to determine whether the physician should be reduced to courtesy staff membership. Before the Committee rendered a decision, the physician failed to receive nomination for staff privileges of any kind at the hospital's annual meeting.

The hospital is a private corporation, and its receipt of contributions and public assistance funds did not convert it into a public corporation. As a private corporation, the hospital is governed by its Board of Directors. The Board cannot be interfered with in the performance of its duties, provided that it acts reasonably and in good faith. Since the physician failed to comply with the hospital's rules and regulations while she was a staff member, the failure to renominate her for staff privileges was not arbitrary and capricious, the court said. The bylaws were reasonable, the action was not motivated by bias, and there was no denial of due process. The hospital did not have a monopoly such that its refusal to renew the physician's staff privileges could be said to deprive her of her right to treat her patients.

Halberstadt v. Kissane, 273 N.Y.S.2d 601 (N.Y., Oct. 5, 1966).

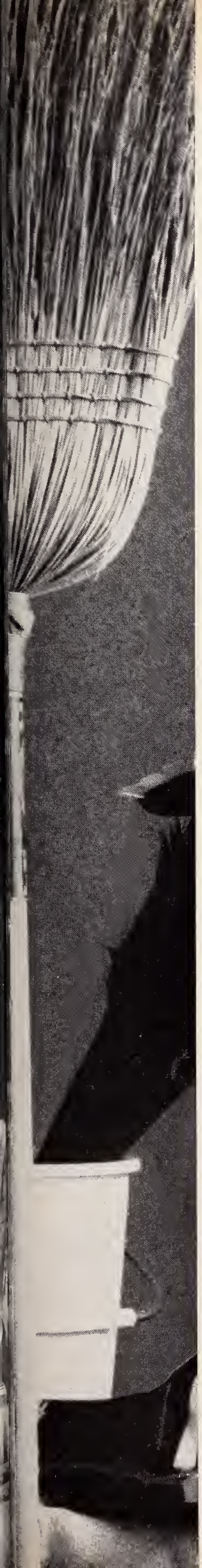
Psychiatrist's Expenditures for Psychoanalytic Training Program Deductible—The Tax Court erred in refusing to permit a practicing psychiatrist to deduct the cost of an extensive training program in psychoanalysis as an ordinary and necessary business expense. the U.S. Court of Appeals for the First Circuit ruled.

Expenditures for education are deductible if the education is undertaken primarily for the purpose of maintaining or improving skills required in the taxpayer's employment, trade, or business. They are not deductible if the education is undertaken primarily for the purpose of obtaining a new position or a substantial advancement in position, or to fulfill the taxpayer's general educational aspirations.

The psychiatrist testified that he took the psychoanalytic training for the purpose of improving his skill as a

Continued





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Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

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psychiatrist. He stated that he intended to continue his research and teaching of psychiatry at a VA hospital and his private psychiatric practice, in which he would use psychiatric or psychoanalytic methods of treatment as indicated by the needs of the patient. He testified as to the way in which all of his postgraduate training had been guided by his belief in the interrelationship of psychiatry and psychoanalysis. He also pointed out, through references to such things as articles in professional journals and the structure of fellowship programs, that the interrelationship was recognized by others. He also testified as to the connection of each part of the psychoanalytic training program to the work of a psychiatrist. This evidence clearly established that the psychiatrist took the training course to improve his skill as a psychiatrist, the court said. The acquisition of a new "specialty" is not necessarily inconsistent with the improvement of skills required for the practicing of a pre-existing profession. It is the purpose for which the education was primarily undertaken that is determinative of the deductibility of the expense of the education.

There was no evidence indicating that the psychiatrist undertook the training program for the purpose of obtaining any "new" position. He testified that he intended to continue his private practice and his work at the VA hospital. There was also nothing to indicate that he undertook the program for the purpose of securing a "substantial advancement in position," except the obvious aim of increasing his stature in the profession. Nor could it be said that he undertook the program for the purpose of fulfilling his general educational aspirations.

Greenberg v. Commissioner of Internal Revenue, 367 F.2d 663 (C. A. 1, Oct. 25, 1966).

Medicare Benefits Cannot be Denied Because of Membership in Communist Group—The section of the Medicare Act which denies benefits to applicants who are members of Communist groups, and the use on the application form of a question on, and disclaimer of such membership are unconstitutional, a federal trial court in California ruled.

The First Amendment protects freedom of association. A statute which proscribes mere knowing membership in an organization without the "specific intent" to further the organization's illegal aims rests on the doctrine of "guilt by association" and is an unconstitutional infringement on the freedom of association.

The constitutional infirmity of the statutory provision and question was not cured by the fact that Medicare benefits are a "gratuity" as to persons not covered by the Social Security or Railroad Retirement Acts. A condition imposed on the granting of a privilege or a gratuity must be a reasonable one. A condition which infringes on the freedom of association is not a reasonable one.

Reed v. Gardner, 35 LW 2277 (D.C., Cal., Nov. 14, 1966). ◄

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Said Stan,
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Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. RX only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2. Scal, J. C.: Eye Ear Nose & Throat Month. **38**:738 (Sept.) 1959.

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(2) **Hematopoietic Factors**	
Iron (from ferrous sulfate)	3.40 mg.
Vitamin B_{12} (cobalamin concentrate, N.F., as Stablets®)	1 mcg.
Vitamin C (ascorbic acid, U.S.P.)	50 mg.
(3) **Digestive Enzyme**	
Pancreatic substance*	50 mg.
(4) **Gonadal Hormones**	
Methyltestosterone, N.F.	1.0 mg.
Ethinyl Estradiol, U.S.P.	0.006 mg.
(5) **Amino Acids**	
L-lysine (monohydrochloride)	50 mg.
L-Glutamic acid	30 mg.

*Enzymatically active defatted material obtained from 250 mg. of whole fresh pancreas.

For older adults who require it, daily supplementation with Neobon can help overcome decreases in endogenous gonadal hormone production, as well as deficiencies of iron, vitamins and other nutritional factors. In a single convenient capsule, Neobon provides vitamins, minerals, gonadal hormones, hematopoietic factors, digestive enzymes, and amino acids—all selected for adjunctive therapeutic value in the geriatric syndrome. For example, one of the gonadal hormones in Neobon is ethinyl estradiol. It is more slowly metabolized in the body than natural estrogens or their esters.

Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

Dosage: One capsule, t.i.d. with meals, or as directed by physician.

Supplied: Bottles of 60 capsules. Rx only.

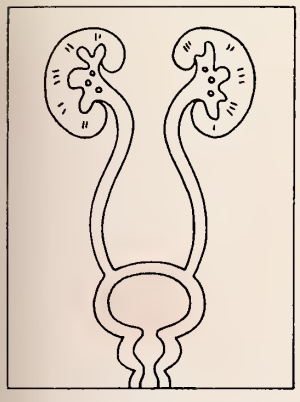
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NEW YORK, N.Y. 10017

The battle with bacteria: cystitis

Artist's conception of cystoscopic view of bladder showing congested blood vessels and edema around ureteral orifice.



consider Gantanol (sulfamethoxazole)



For vigorous treatment of G.U. infections before the invaders become entrenched... Gantanol (sulfamethoxazole) offers a comprehensive spectrum of antibacterial effectiveness against most common gram-negative as well as gram-positive invaders. In addition, it provides satisfactory concentrations in the blood and urine with ready diffusion into interstitial fluids for antibacterial activity at foci of bacterial invasion.

High antibacterial activity against *E. coli* and other common urinary pathogens... A review of 153 cases of acute G.U. infections reported in the literature shows that 90% responded to Gantanol (sulfamethoxazole), with over one-half of these patients showing excellent relief of symptoms.[1,2] Even in stubborn chronic G.U. infections, almost 60% of 450 patients improved on Gantanol (sulfamethoxazole), including many who had not responded to other antibacterials.[1-6]

Generally uncomplicated therapy enhances the favorable clinical results... Of the total 686 patients from the studies cited,[1-6] only three discontinued therapy because of side effects. Most of the side effects reported (approximately 3%) were mild and included nausea and/or vomiting, skin rash, dizziness, headache, gastritis, generalized uneasiness and itching.[1-6]

1. Peters, J. H.: *J. Urol.*, *87*:747, 1962. 2. Draper, J. W., *et al.*: *South. M. J.*, *57*:920, 1964. 3. Stewart, B. L.: *J. Urol.*, *87*:491, 1962. 4. Hagstrom, R. S.: *Rocky Mountain M. J.*, 59:(2), 37, 1962. 5. Arnold, J. H.: *Clin. Med.*, *71*:552, 1964. 6. Nelson, C. G.: *Colorado GP*, *3*:(3), 2, 1961.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How Supplied: Tablets, 0.5 Gm, bottles of 50.

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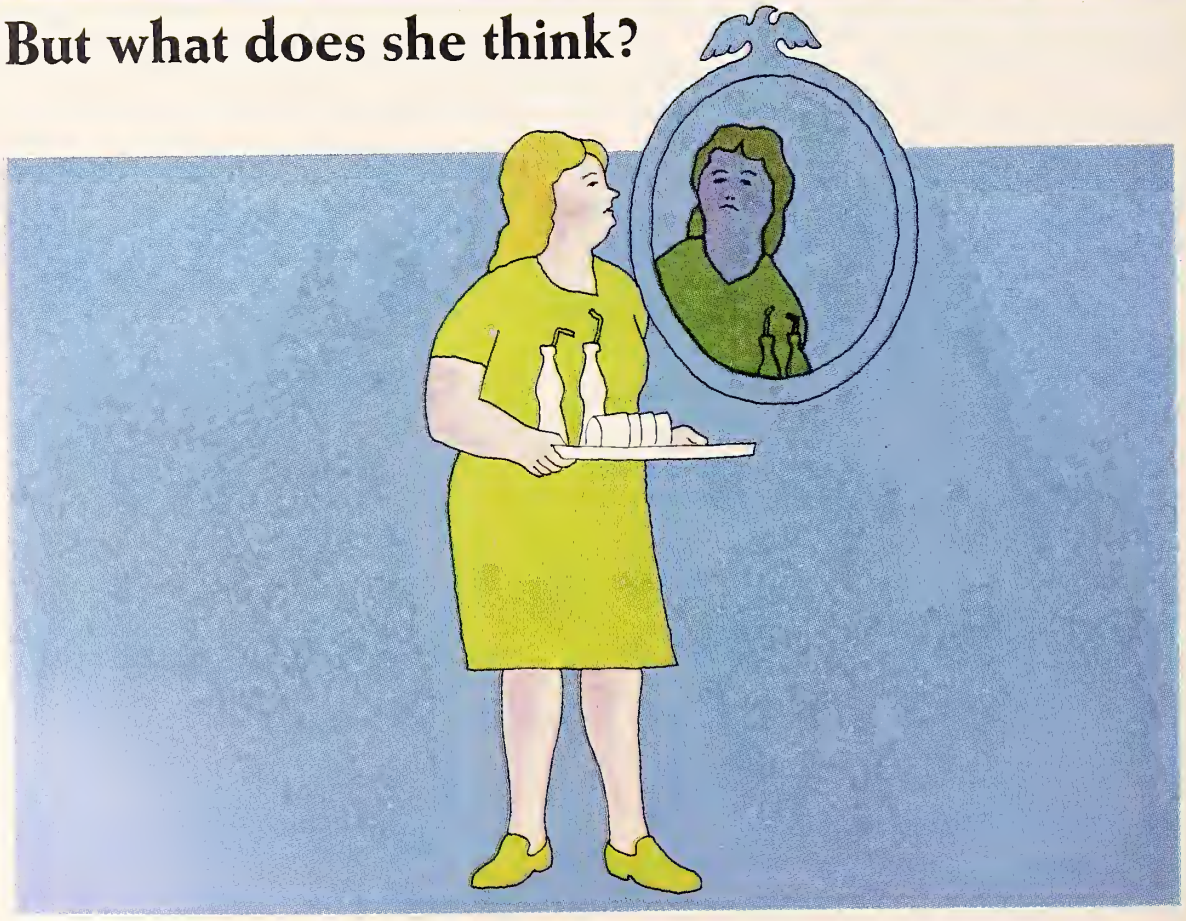
when there are bacterial invaders in the bladder, prostate or kidneys

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(sulfamethoxazole)

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But what does she think?



Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

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DEXTRO-AMPHETAMINE SULFATE (15 mg.) WITH MEPROBAMATE (300 mg.) SUSTAINED RELEASE CAPSULES

to help establish a new dietary pattern

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcaholics, former addicts, and other severe psychoneuratics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprabamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insamnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vamiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may accur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dase, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case af fatal bullous dermatitis, following administration of meprabamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angianeuratic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, practitis (1 case), anaphylaxis, agranulocytasis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditians were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accammodation. Massive overdasage may praduce drowsiness lethargy, stupor, ataxia, coma, shock, vasamotor and respiratory collapse.

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ABSTRACTS

BOOK REVIEWS

LITTLE STROKES

Walter C. Alvarez, J. B. Lippincott Co., Philadelphia, 1966; 190 pages; $8.00.

Dr. Alvarez has spent a long lifetime developing the whole matter of "little strokes." In fact, this most important topic owes much of its present status to the lucid, original thinking and the prolific pen of just this distinguished professor of medicine. Within the compass of a really slim volume, he has managed to present clearly and simply the essence of the important current thinking on this truly controversial subject.

Dr. Alvarez presents the conventional classification of strokes as little, brief, silent and prodromal. Then, he proceeds to list something like 170 different names for "little strokes!" Incisively, he sketches in their diagnosis (by whatever name), pathology, prognosis and treatment. He is even objective about the little strokes he himself has undergone!

The bibliography is extensive; what matters is well compiled; it is discursive and readable without being stuffy. The publishers have done a fine job of printing, binding and proofreading.

We all must wish Dr. Alvarez many more years of continuing, productive teaching and writing. *Little Strokes* is just the handy, bedside volume one should keep for repeated reading and enjoyed instruction! Bravo!

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

SYMPOSIUM ON SURGERY OF THE OCULAR ADNEXA

The New Orleans Academy of Ophthalmology, The C. V. Mosby Co., St. Louis, Mo., 1966; $16.00.

This is a very practical book for the practicing ocular surgeon as a quick reference and refresher. It is composed of a collection of lectures from the Symposium on Surgery of the Ocular Adnexa given at the 1965 meeting of the New Orleans Academy of Ophthalmology.

The subjects or conditions discussed are those that may be seen any day in private offices or clinics. It was not intended that each subject be treated in depth or detail as in a textbook. The articles are all "meat" and to the point. Each is written by an ophthalmologist of note in his particular field and the treatment described is the one found most effective in his hands.

A section at the back of the book has recorded the roundtable discussions and points out differences of opinion. The book is small enough and sufficiently light in weight to be held comfortably. It has only 245 pages. The paper and printing are of good quality and the photographs and illustrations are excellent. All-in-all it is as readable and enjoyable a book on this subject as I have found.

FRANK H. COBLE, M.D.
Richmond

IT ALL STARTED WITH HIPPOCRATES

Richard Armour; illustrations by Campbell Grant; McGraw-Hill Book Co., New York, N.Y., 1966; 135 pages; $3.95.

"A Mercifully Short History" is an excursion into the realm of flippant punning and startling turn of phrase. Mr. Armour is solemn in stating that after chloroform was discovered, we had "a choice of ether or." The doctors "wonder which wonder drug to prescribe." Is it "pussible to get the pus out?"

Similarly, the expositions of halitosis, sweating, etc., presented with sarcastic good humor are quite amusing even if hardly elevating.

Everybody has his own personal favorite dispensers of the punny, funny line. I happen to like Golden, Buchwald and Levenson. However, this introduction to Richard Armour is relaxing. In time, I may think it humerous without having to break my humerus. Contagious, isn't it?

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

RESPIRATORY CARE

H. H. Bendixen, L. D. Egbert, J. Hedley-Whyte, M. B. Laver, H. Pontoppidan. The C. V. Mosby Co., St. Louis, 1965; 252 pages; $15.00.

This book begins with four chapters on physiological considerations. The material is well organized and well written, although there are a few inadequate explanations.

The other chapters on diagnosis, prevention and therapy are clinically oriented and contain a lot of the authors' personal experiences. The presentation is generally clear and highly readable. Although some of their opinions are a bit dogmatic, the information supported by their unique experience is extremely helpful.

The remaining chapters on special problems are very useful and represent the most unique part in this book. They are practical and informative when one deals with the special problems such as chest injuries, intracranial lesions, cardiac surgery, acute poisoning, etc.

In general, the book is to be highly recommended for those who work in a respiratory care unit. It is also helpful for many others who are in clinical medicine dealing with respiratory care.

WEI-PING LOH, M.D.
Gary

DISEASES OF THE HEART

Charles K. Friedberg, M.D., W. B. Saunders & Co., Phila., Pa., third edition, 1966; 1787 pages with numerous illustrations; $21.00.

This complete revision and enlargement of a great classic is a tribute to the author's discriminating erudition and phenomenal industry. In this day of battalions of assistants, it is startling, indeed, to see a single individual plunge undismayed into so colossal a task and emerge triumphantly with reputation enhanced.

Every chapter shows painstaking survey of the literature and a sober, balanced, personal assessment of the general consensus. Despite the hefty size of the monograph, I took it along on a long plane trip; it was read through in its entirety rather than being spot-checked. I think I have benefited immeasurably from the sustained effort!

"Accrochage" I found in no dictionary. However, Dr. Friedberg was kind enough to define the word as, "true synchronization." The discussion on Mobitz block is the best I've seen to date. The beautiful presentation on "Cellular Action of Digitalis on Myocardial Contractility" (p. 353 on) is the very essence of lucid condensation. Even the latest work on ethacrynic acid and frusemide is analyzed and balanced with the other diuretic agents. I could go on and on but, truly, this third edition belongs on every library shelf. *Of course*, no internist can afford to be without it. I do think that the general practitioner could also benefit by having it handy.

Amazingly enough, I did not find a single typographical error. I did not check the endless bibliographical references. The two column type makes for easier reading. The single volume weighs over seven pounds! I would recommend the two volume set.

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

PRIMER ON PREMATURITY AND HIGH-RISK PREGNANCY

S. Gorham Babson, Ralph C. Benson, The C. V. Mosby Co., St. Louis, 1966; illustrated; 194 pages (including index); $10.50.

This most excellent book is actually what its name implies—a primer — but it is a most sophisticated one. The authors state that they have attempted a blend of "what's new" and "what's true." This approach, together with the very rational outlines given of each element of their subject and with their ability to condense yet preserve clarity, results in what should be a most practical and easy-to-use guide in the care of premature infants.

"High-risk pregnancy", for example, is analyzed according to its various factors — maternal, paternal, fetal and placental. Throughout the booklet, the reciprocity, or interdependence of these factors, is kept always in mind as a sort of frame upon which to hang all of the many entities involved in this double-specialty of medicine. The mutual responsibilities of obstetrician and pediatrician are well brought out.

While it might be thought of value chiefly in residency training, this book would be worthwhile to anyone engaged in obstetrics or pediatrics not only for quick reference to compose one's thoughts about a problem, but also for browsing in search of mental stimulation. There is nothing nebulous about this work. It is all specific, crisp and clear.

A. W. CAVINS, M.D.
Terre Haute

ARTHRITIS AND ALLIED CONDITIONS

Jos. L. Hollander and collaborators, Lea & Febiger, Philadelphia, Pa., 1966; 1355 pages with innumerable illustrations; seventh edition; $32.50.

My admiration for this magnum opus of rheumatology increases with each successive edition. In the Aug., 1962, issue of the *JISMA*, I sang the praises of the sixth edition. This revision has managed to keep abreast of the innumerable advances of this ever expanding sub-specialty. By using the double column format, the publisher has been able to keep the size down to that of the preceding volume. This, despite the fact that 20 chapters have been totally revised and nine new ones added!

Fresh advances are constantly coming to the fore. Obviously, this edition could not have in it the just announced production of an anti-streptococcal serum that will (hopefully) tend to eliminate rheumatic carditis. However, the very excellent discussion by Dr. Taranta did not bring out the curious fact of the female sex being much more susceptible to rheumatic fever than is the male. (In my own immediate family, my mother, wife (and a sister) plus both my daughters had the disease while my son and I escaped all manifestations of it!)

Every medical practitioner and student should have this book on his working shelf, take the time to read it often and make a habit of using it for reference.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

PREIMPLANTATION STAGES OF PREGNANCY

Ciba Symposium, edited by G. E. W. Wolstenholme and Maeve O'Connor, Little, Brown and Co., Boston, Mass., 1965; 430 pages; 153 illustrations; $13.50.

This compendium is a good illustration of what is going on in the basic sciences! Something like 16 of the finest research workers in their particular field had gathered to compare experiences and plan for further probes. "The fine structure of the blastocyst," "energy metabolism in mouse embryos," "nucleic acid and protein synthesis in mouse embryos," "chimeras", etc., etc..

The entire symposium is excellent material for the shelves of



One by one the family's downed Because the G.I. bug's around

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin,
and protects intestinal mucosa

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.
Usual Children's Dose: One or two teaspoonfuls three times daily.

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libraries at departments of zoology, anatomy, veterinary sciences, etc.. An obstetrician and gynecologist might find some material relevant to his work. I doubt that the ordinary doctor of medicine would do more than just scan through it.

The high standards set by the publisher are maintained as usual.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

Abstracts From Various Literature, Prepared by AMA

NARCOTIC BLOCKADE

V. P. Dole, M. E. Nyswander, and M. J. Kreek (Rockefeller University, New York)

Arch. Intern. Med. 118:304-309, (Oct.), 1966.

A stable blockade against the narcotic effects of heroin can be maintained by a single daily dose of methadone. Blockade is established by gradual increase in dosage to a stabilization level; thereafter, the dose of methadone remains constant. This procedure is being tested as an adjunct in rehabilitation of "mainline" addicts who had repeatedly relapsed after previous attempts at withdrawal and psychotherapy. With the maintenance treatment, the patients lost their craving for heroin. No patient has become readdicted to heroin. A majority of the patients are now steadily employed. The therapeutic trial, started two and one-fourth years ago, is continuing.

DIETARY REGULATION OF CHOLESTEROL METABOLISM

P. D. S. Wood, R. Shioda, and L. W. Kinsell (Highland General Hospital, Oakland, California)

Lancet 2:604-607, (Sept. 17), 1966.

On the basis of studies carried out over a three-year period, it seems that substitution of predominantly unsaturated for less unsaturated fat in the diet in the absence of dietary sterols, in the presence of physiological amounts of dietary cholesterol, or in the presence of vegetable sterols, results in a significant and maintained fall in the level of plasma cholesterol. Evaluation of combined chemical and isotopic data is compatible with the concept of increased mobilization of cholesterol from one or more portions of the body miscible pools.

ANTIBODIES TO HUMAN GROWTH HORMONE

S. D. Frasier (University of California School of Medicine, Los Angeles) and F. G. Smith, Jr.

Amer. J. Dis. Child. 112:383-388, (Nov.), 1966.

Antibodies to human growth hormone (HGH) were detected in the plasma of a patient who failed to respond to long-term therapy with HGH by the binding of HGH ^{131}I. Binding was localized to the 7S*y*-globulin fraction of the plasma proteins. The rat tibia test demonstrated the neutralization of the biological effect of HGH by the patient's plasma. The development of antibodies to HGH may be a significant cause of failure to respond to HGH therapy.

TREATMENT OF ADVANCED INOPERABLE OVARIAN CARCINOMA WITH THIO-TEPA

G. Blinick et al. (Beth Israel Hosp., New York)

Amer. J. Obstet. Gynec. 96:425-429, (Oct. 1), 1966.

Chemotherapy with thio-tepa was used in the treatment of 105 patients with advanced ovarian carcinoma. Objective signs of remission were observed in 63 patients, with a duration of remission which ranged from one month to over six years. Remission was observed as a decrease in the size of the tumor mass in 52 patients, disappearance of serous effusion in 30 patients, and the relief of intestinal obstruction in three. The majority of patients experienced a remission of less than 21 months. Side effects included anemia in 21 patients, leukopenia in 17, and thrombocytopenia in 57.

INCREASING AUTOPSY INCIDENCE OF CORONARY HEART DISEASE IN WOMEN

H. M. Parrish et al. (University of Missouri Medical School, Columbia)

Arch. Intern. Med. 118:436-445, (Nov.), 1966.

An epidemiological study of coronary heart disease (CHD) and coronary atherosclerotic blockage was conducted among women in an autopsy population. The autopsy incidence of CHD increased from 1935 to 1949 and from 1950 to 1959. The autopsy prevalence of coronary atherosclerotic blockage increased in a group of patients thought to be reasonably representative of the general population. Coronary atherosclerosis increased with age, was positively associated with hypertension, and was not associated with body weight.

HEMODYNAMIC AND METABOLIC EFFECTS OF HYPERBARIC OXYGEN IN MYOCARDIAL INFARCTION

A. J. V. Cameron et al. (Cardiac Dept., Western Infirmary, Glasgow, Scotland)

Lancet 2:833-837, (Oct. 15), 1966.

The hemodynamic and metabolic effects of hyperbaric oxygen were investigated in ten patients with acute myocardial infarction, who were made to breathe air, oxygen at atmospheric pressure, and oxygen at two atmospheres pressure. The cardiac output, intravascular arterial pressure, heart rate, blood gas tensions, pH, lactate and pyruvate levels were measured. Blood pressure, systemic vascular resistance, and arterial oxygen tension rose progressively. This was accompanied by some reduction in cardiac output and stroke volume with little change in the heart rate. In patients with raised lactic acid levels there was a reduction after hyperbaric oxygen. No evidence of oxygen toxicity was encountered.

CANDIDA ALBICANS AND THE CONTRACEPTIVE PILL

R. D. Caterall (Dept. of Venereology, Middlesex Hosp., London)

Lancet 2:830-831, (Oct. 15), 1966.

Fourteen women taking oral contraceptive pills containing norethynodrel and mestranol were found to have vaginal candidosis which had appeared after an average period of nine months from the start of oral contraception. Four men, the sexual contacts of those women taking oral contraceptive pills who were found to have vaginal candidosis, presented first with candidal balanoposthitis. Four other men were found to have clinical manifestations suggestive of balanoposthitis due to hypersensitivity to vaginal candidosis in their sexual partners. Treatment with nystatin was satisfactory in most of the patients, but two women had to abandon the use of oral contraceptives on account of frequent relapses. Inquiry about oral contraceptive pills may help in the management of women with vaginal candidosis and of men with balanoposthitis.

SEX CHROMATIN AND CHROMOSOME ANALYSIS IN OVARIAN TERATOMAS

M. N. Rashad, M. F. Fathalla, and M. G. Kerr (Univ. of Edinburgh, Edinburgh)

Amer. J. Obstet. Gynec. 96:461-465, (Oct. 15), 1966.

This study includes 187 specimens of benign ovarian teratomas

with a chromosome analysis of six of these specimens. The percentage of cells with demonstrable sex chromatin varied between 23% and 87% with a mean of 56%. In several tumors, an occasional cell appeared to show double sex chromatin, but in no case was this the predominant cell type. These findings indicate that our specimens were chromatin positive as in normal female tissues. Chromosome analysis of the six benign tumors revealed a normal diploid female karyotype, 46XX.

IS ROUTINE ORDERING OF BOTH HEMOGLOBIN AND HEMATOCRIT JUSTIFIABLE?

D. J. Addison (Ottawa Civic Hosp., Ottawa)
Canad. Med. Assoc. J. 95:974-975, (Nov. 5), 1966.

In order to assess the value of routine simultaneous hemoglobin and hematocrit determinations, paired determinations in the following groups were studied: (1) 360 consecutive pairs from the hematology laboratory, (2) 95 pairs on general medical cases, (3) 43 pairs from ten cases of upper gastrointestinal hemorrhage, and (4) 62 pairs in ten burn cases. These values were plotted on scatter diagrams. In the 560 pairs only three disparate determinations were found. In most clinical situations, determination of the hemoglobin or the hematocrit as a screening procedure provides as much useful information as is obtained by simultaneous determinations of both.

CORTICOSTEROID WITHDRAWAL IN RHEUMATOID ARTHRITIS

P. A. Bacon, et al. (West London Hosp., London)
Lancet 2:935-937, (Oct. 29), 1966.

Corticosteroid withdrawal was attempted in a group of patients with severe rheumatoid arthritis whose disease appeared quiescent on their current dose. In ten out of 35 patients corticosteroids were successfully withdrawn by slowly reducing the dose. Twenty-three of the 24 failures were due to continued activity of the arthritis; in only one patient was withdrawal stopped on account of pituitary-adrenal failure; one patient is still in the process of withdrawal. A small group of patients were given a weekly dose of corticotropin which had no apparent effect on the case of withdrawal. Plasma-cortisol estimation was of value in assessing pituitary-adrenal function during withdrawal.

CARDIAC VALVE REPLACEMENT WITHOUT BLOOD TRANSFUSION

D. A. Cooley, et al. (Baylor Univ. College of Medicine, Dallas)
Amer. J. Surg. 112:743-751, (Nov.), 1966.

Seven successful cases of prosthetic cardiac valve replacement in patients who were Jehovah's Witnesses are reported. No transfusions were used before, during or after operation. Twelve additional patients undergoing valve replacement while receiving no blood transfusions are also reported. Temporary cardiopulmonary bypass was conducted under normothermic conditions using disposable plastic bubble oxygenator primed with a five percent solution of dextrose in distilled water containing heparin. Bypass was instituted by allowing gravity drainage of blood from the venae cavae. Arterial return was accomplished by pumping the priming fluid into the femoral artery. At the completion of bypass, all blood in the bypass system was infused slowly into the patient. Although intracardiac blood was removed via suction and returned to the patient, no effort was made to retrieve blood spilled into the pleural or pericardial cavities. ◄





Dr. Carl P. Huber Appointed I.U.'s First Coleman Professor



Dr. Huber

Dr. Carl P. Huber, Indianapolis, professor and chairman of the Department of Obstetrics and Gynecology at Indiana University School of Medicine, has been appointed the first Coleman Professor.

The endowed chair is made possible by the benefaction of Mr. and Mrs. W. H. Coleman who made gifts of property to Indiana University in memory of their daughter, Suemma Coleman Atkins, for the building of the Coleman Hospital for Women and for the support of chairs in the school of medicine.

Dr. William M. Loehr Speaker for April History of Medicine Society

Dr. William M. Loehr, professor of radiology at the Indiana University School of Medicine, will speak at the May 18 meeting of the John Shaw Billings History of Medicine Society. His topic will be "Wilhelm C. Roentgen and His Indianapolis Relatives."

The group meets at the I.U. Student Union Building, Indianapolis. The social hour begins at 6 p.m., dinner is set for 6:45 p.m. and the speaker at 8 p.m.

1967 Rorer Awards Contest for Best Papers in Gastroenterology

The American College of Gastroenterology, in cooperation with William H. Rorer, Inc., announces the 1967 Rorer Awards Contest for the best papers in gastroenterology. Two classes of awards will be given—one for unpublished papers and the second for papers published in *The American Journal of Gastroenterology.*

First prize in each category is $500 and a three-year subscription to *The Journal,* second prize is $300 and a two-year subscription, the third prize is $200 and a one-year subscription. All entries must be received not later than June 15. Full particulars may be obtained by writing the College at 33 W. 60th St., New York City 10023.

Dr. Carl D. Martz Appointed

Dr. Carl D. Martz, Indianapolis, has been selected for a three-year term on the Committee on Trauma of the American College of Surgeons.

New Medical Education Film Now Available to Physicians

A new medical education film "Oral Cancer" is now available in Indiana. The 22-minute film was produced by the American Cancer Society for use by physicians.

The film demonstrates a systematic method of oral examination for detection of cancer, illustrates in still and motion photography various oral lesions and demonstrates several technics for biopsy.

The film is available free for showing to medical audiences through local units of the American Cancer Society, or by contacting the ACS, Indiana Division, 445 N. Pennsylvania St., Indianapolis 46204.

Dr. Price Joins Lilly Staff



Dr. Price

Dr. Francis W. Price, Indianapolis, has joined Eli Lilly and Company as a staff physician in the industrial medicine division.

Dr. Price is a 1951 graduate of Indiana University School of Medicine and has been engaged in the private practice of medicine in Indianapolis for the past 15 years.

Seven Indiana Doctors Are Appointed to AMA Positions

One Indiana physician has been appointed to an AMA committee and six others have been reappointed to councils and committees. **Dr. Sprague Gardiner,** Indianapolis, was recently appointed a member of the Committee on Human Reproduction.

Dr. Neal Baxter, Bloomington was reappointed chairman of the Committee on Aerospace Medicine of the Council on Occupational Health. **Dr. Norman Booher,** Indianapolis, was reappointed a member of the Council on Voluntary Health Agencies.

Dr. Wallace D. Buchanan, South Bend, was reappointed the principal representative of the American College of Radiology of the Interspecialty Committee for 1967. **Dr. C. G. Culbertson,** Indianapolis, was reappointed a member of the Committee on Blood.

Dr. Earl W. Mericle, Indianapolis, was reappointed a member of the Committee on Alcoholism and Addiction of the Council on Mental Health and **Dr. Herman Wing,** Gary, was reappointed a member of the Committee on Medicolegal Problems.

Attends Medical Meetings

Dr. Dan Urschel of Mentone recently attended the annual meet

ing of the American College of Cardiology in Washington, D.C. Dr. Urschel also participated in a meeting at the medical department of the Federal Aviation Agency, discussing cardiac examination requirements for pilots.

Medical Problems of the Aging Grants for Resident Physicians

Lederle Laboratories in cooperation with the American Geriatrics Society is continuing its custom of awarding three $1,800 grants to resident physicians to encourage them to devote more time to the study of medical problems of the aging.

Applications for grants should be addressed to the Fellowship Committee, American Geriatrics Society, 10 Columbus Circle, New York City 10019. Deadline is June 1.

Dr. Kobak Conducts Program

Dr. Alfred J. Kobak, Jr., Valparaiso, recently conducted a Lenten Forum on healthful family living at the First Methodist church there. He introduced the subject "Toward Knowing a Fulfilled Marriage Relationship."

Dates for 1967 Summer Camp For Diabetic Children Announced

The Summer Camp for Diabetic Children will be conducted for the 19th year under the auspices of the Diabetes Association of Greater Chicago from July 16 through August 6, 1967 at Holiday Home, Lake Geneva, Wisconsin. Boys and girls from eight through 13 years of age are eligible.

As in previous years, the camp will be staffed by resident physicians, a nurse, dietitians and laboratory technicians, in addition to the regular counseling and domestic staff of Holiday Home.

Rates for summer camp are arranged in accordance with individual circumstances.

Applications may be obtained from, and inquiries should be directed to: Diabetes Association of Greater Chicago, 620 N. Michigan Ave., Chicago, Illinois 60611.

Dr. Marshall is Speaker

Dr. Albert Marshall, Indianapolis, director of the Division of Communicable Diseases for the Indiana State Board of Health was one of the featured speakers at a recent meeting on sex education and venereal diseases sponsored by Highland Senior High School.

Dr. de Wolfe Visiting Professor

Indianapolis Methodist Hospital was host recently to Dr. Victor G. de Wolfe of Cleveland, Ohio. Dr. de Wolfe, chairman of the Department of Peripheral Vascular Diseases at the Cleveland Clinic, served as visiting professor at the hospital for two days. His visit was sponsored by the Department of Medical Education.

Dr. de Wolfe delivered an address on "Present-Day Concepts in the Diagnosis and Treatment of Pulmonary Embolism" before the Internal Medicine Section and participated in a conference on vascular problems with scleroderma and a clinic at which patients with various types of peripheral vascular disorders were presented. The program was arranged by a committee composed of **Drs. Kenneth R. Woolling,** chairman, and **George W. Applegate, Warren E. Coggeshall,** and **Dr. Hall.**

Lilly Introducing Individual Packaging of Hospital Unit Doses

Eli Lilly and Company is introducing individual packaging of unit doses of tablet and capsule forms of medication with full identifying information as well as the Lilly Identi-Code™, for the protection and easy identification of all dosage forms.

The system is especially designed for hospital use, to allow the return to the drug room of medication not consumed prior to the patient's dismissal. The packaging system is called Identi-Dose™. The individual doses are arranged originally in strips of 10 and are stored in quantity in cartons which occupy little shelf space as compared with conventional strip packaging and bulk packaging.

Dr. Voorhees is Speaker

Dr. Robert J. Voorhees, Fort Wayne, was guest speaker at a recent meeting of home demonstration members and DeKalb county residents at the courthouse in Auburn. He spoke for a special program on heart disease.

American Academy of Pediatrics Publishes Manual on Adoption

"Adoption of Children" is a manual, published by the American Academy of Pediatrics, for the information of physicians, attorneys and social workers.

The book is divided into a general introduction, basic information about adoption, pediatric services in adoption, social services in adoption, legal services in adoption, placement of unadoptable children, and interstate and intercounty adoptions. Copies of the book may be obtained for $1.50 from the Academy at 1801 Hinman Ave., Evanston, Illinois 60204.

Dr. Dragoo is Speaker

Dr. John R. Dragoo, Wabash, gave a talk about the heart recently at the Lagro Township Farm Bureau meeting in Lagro School.

Continued



Course in Medical and Science Writing Offered in California

Three days of seminars on the writing of medical and other scientific manuscripts will be held May 12-14 at Big Sur, California, under the joint sponsorship of the Esalen Institute and the Northern California Chapter of the American Medical Writers' Association.

The program will alternate between lectures and workshops. W. D. Snively, Jr., M.D., Evansville, a former president of AMWA, will teach a course in "Sentence and Paragraph Structure." Participants will be required to write an abstract of an assigned article, and the abstracts will then be criticized in one of the workshop sessions.

Another workshop will deal with "Intensive Editorial Review of a Manuscript," and a third will take up "Approaches to the Subject."

Membership in the sponsoring organizations is not necessary for enrollment. The $60 fee for the course includes room and meals. For registration or further information, contact: Harley Messinger, M.D., Ph.D., 3029 Benvenue Ave., Berkeley, Calif. 94705. Telephone 841-8693 or 843-2576.

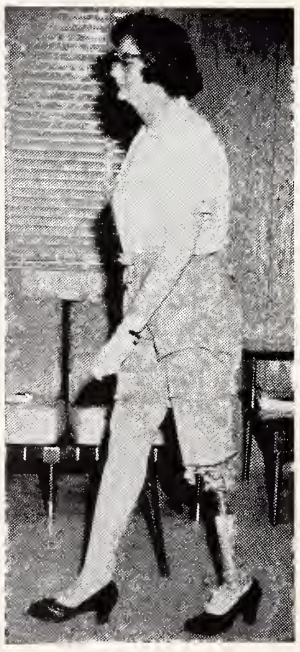
Physicians on Panel

Seven Indiana physicians recently presented programs at East Gary High School's "Career Days." The two-day program was designed to provide vocational and occupational information on recruiting into the medical professions. The doctors who participated in the program were **Drs. Robert A. Penn, John J. Reed, Walfred A. Nelson, Leo R. Radigan, Joseph E. Kopcha, Thomas J. Senese and John T. Scully.**

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Purdue University Receives Grant for New Pharmacy Building

Purdue University School of Pharmacy and Pharmacal Sciences has received a grant from the U. S. Public Health Service under the Health Professions Educational Assistance Act of 1963 for $1,275,952 to help in the building of a six-story pharmacy building.

The new facility will contain laboratories, animal quarters, an auditorium and classrooms and will provide for an increase of 38 students.

Dr. B. L. Martz Elected

Dr. B. L. Martz, Indianapolis, was elected as a vice president of the American College of Cardiology at its annual scientific session in Washington, D. C. recently.

Training Program in Medical Librarianship Offered in Ohio

A training program in medical librarianship and communication in the health sciences will be initiated by the School of Library Science of Western Reserve University, Cleveland, in July with the support of a five-year grant of $377,915 from the U. S. Public Health Service through the Extramural Program of the National Library of Medicine.

The program, leading after one year to the degree of M.S. in Library Science, will provide training in both traditional and automated methods of information processing and dissemination within the context of medical libraries, organization of health care and medical research.

In addition to courses in information retrieval systems, library automation, and information centers and services, trainees will be offered a specialized sub-curriculum in which they will be introduced to the objectives, organization and functions of the several types of health sciences libraries. The program will utilize the resources and facilities of the School of Library Science and its Center for Documentation and Communication Research, the School of Medicine and the Cleveland Health Sciences Library on the Western Reserve University campus.

Six stipends of $2,400 plus dependency allowance and full payment of fees will be available to applicants of excellence and potential. For further information contact the Program Director, Professor Alan M. Rees, School of Library Science, Western Reserve University, Cleveland, Ohio 44106.

PMA Announces Awarding of Three Faculty Development Grants

The Pharmaceutical Manufacturers Association Foundation announces the awarding of the first three faculty development grants for clinical pharmacology.

Dr. Faruk Abuzzahab of the University of Minnesota, Dr. John Holcenburg of the National Heart Institute and Dr. John L. McNay of Emory University will conduct drug research from a pharmacologic basis for the next two years. ◄

Annual Meeting Dates of Professional Medical and Allied Organizations

AMERICAN MEDICAL ASSOCIATION ANNUAL CONVENTION
Date June 18-22, 1967
Place Atlantic City, N.J.

NORTHERN INDIANA PSYCHIATRIC SOCIETY
Date Fourth Wednesday of every month, September through June
Place For location and program, inquire Beatty Memorial Hospital, Westville

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of the month, October through May, excluding December
Place The Athenaeum, Indianapolis

INDIANA STATE DENTAL ASSOCIATION
Date May 14-17, 1967
Place Claypool Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Medical Microbiology Seminar:
Date May 13-14, 1967
Place Rice Auditorium, Indiana State Board of Health, Indianapolis

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 12-14, 1967
Place Stouffer Inn, Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Date July 18-20, 1967
Place French Lick Sheraton Hotel, French Lick

INDIANA ACADEMY OF GENERAL PRACTICE
Date May 3-4, 1967
Place Murat Temple, Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date Nov. 1-3, 1967
Place French Lick-Sheraton Hotel, French Lick

BONE AND JOINT CLUB
Date May 3, 1967
Place The Athenaeum, Indianapolis

INDIANA PUBLIC HEALTH ASSOCIATION
Date April 25-26, 1967
Place Indianapolis

INDIANA STATE MEDICAL ASSOCIATION CONVENTION
Date October 9-12, 1967
Place Indianapolis

INDIANA STATE ASSOCIATION OF MEDICAL ASSISTANTS
Date April 28-30, 1967
Place Van Orman-Roberts Hotel, Muncie

INDIANA ROENTGEN SOCIETY
Date May 7, 1967
Place Indianapolis

INDIANA STATE NURSES ASSOCIATION
Date Oct. 12-14, 1967
Place French Lick-Sheraton Hotel, French Lick

INDIANA SOCIETY OF ANESTHESIOLOGISTS
Date May 13, 1967
Place Marott Hotel, Indianapolis

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date June 3, 1967
Place Hotel VanOrmand, Fort Wayne



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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—February, 1967

Disease	Feb. 1967	Jan. 1967	Dec. 1966	Feb. 1966	Feb. 1965
Animal Bites	399	351	495	326	329
Chickenpox	456	442	350	1029	743
Conjunctivitis	98	68	63	154	116
Diphtheria	1	0	0	0	0
Dysentery, Unspecified	117	70	30	196	29
Gonorrhea	723	336	579	346	267
Impetigo	73	90	110	101	100
Infectious Hepatitis	85	28	43	49	70
Infectious Mononucleosis	62	52	53	97	94
Influenza	68	654	644	1243	1301
Measles (Rubeola-Rubella)	126	134	92	1000	320
Meningitis, Meningococcal	4	3	4	7	4
Meningitis, Other	9	2	4	4	9
Mumps	702	431	306	436	335
Pertussis (whooping cough)	10	14	17	7	32
Pneumonia	329	237	240	310	299
Poliomyelitis	0	0	1	0	0
Streptococcal Infection	953	596	472	2287	753
Syphilis					
Primary & Secondary	7	5	3	8	9
All Other Syphilis	68	60	95	76	80
Tinea Capitis	19	10	15	11	9
Tuberculosis (Active)	113	81	128	62	87

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FUTURE MEETINGS, SEMINARS, COURSES

ISMA Members Invited to 1967 Cancer Society Scientific Session

Members of the ISMA are invited to attend the 1967 Scientific Session of the American Cancer Society on May 3 at the Sheraton-Dallas Hotel, Dallas, Texas.

Current concepts in etiology and diagnosis of cancer will be covered from the practical standpoint. Copies of the program and more information may be obtained by writing Vice-President for Professional Education, American Cancer Society, 219 E. 42nd St., New York City 10017.

Denver Children's Hospital Sets Annual Spring Clinics

Children's Hospital, Denver, is holding its Spring Clinics at Vail on June 26, 27, 28. Guest faculty will include Sydney Gellis, M.D., Tufts University; Mary Ellen Avery, M.D., Johns Hopkins University; Robert Kugel, M.D., University of Nebraska; James K. Weaver, M.D., University of New Mexico; William Daeschner, M.D., University of Texas; Hugh Thompson, M.D., Tucson, District Chairman of Region VIII of the Academy of Pediatrics.

There will be morning seminars and lectures, with afternoons of leisure in the Rocky Mountains. Advances in Pediatrics and The Path Ahead in Pediatric Practice will be the guidelines for the clinics.

Fee is $40.00. Write: Joseph Butterfield, M.D., Children's Hospital, Nineteenth Avenue at Downing, Denver, Colorado 80218, for further information.

American Rheumatism Association Annual Meeting to be June 15-16

The American Rheumatism Association will hold its annual meeting at the New York Hilton on June 15 and 16.

Full particulars may be obtained by writing Miss Margaret M. Walsh, Exec. Secy., 1212 Avenue of the Americas, New York City 10036.

Environmental Health Management National Congress April 24-26

The National Congress on Environmental Health Management will be sponsored by the AMA in a three-day scientific meeting at the Americana Hotel in New York City on April 24 to 26.

Authorities on pollution of air, water and other resources will join with health authorities in a series of lectures and panel presentations. Further information may be obtained by writing the AMA Council on Environmental and Public Health, 535 N. Dearborn, Chicago 60610.

Fourth Midwest Anesthesiology Conference to Meet May 11-13

The Fourth Midwest Anesthesiology Conference, sponsored by the Illinois Society of Anesthesiologists, will meet in the Palmer House, Chicago, on May 11, 12 and 13.

The scientific program will deal with physiologic measurements in clinical anesthesia. For further information write Dr. Anna E. Barnstable, 301 Oak Tree Lane, Waukegan, Illinois 60085.

Clinical Electroencephalography Course Will Be Conducted June 5-7

A continuation course in "Clinical Electroencephalography" will be conducted on June 5-7 in Philadelphia, Pennsylvania.

This is the second course sponsored by the American EEG Society (aided by a grant from the Bureau of State Services, U.S.P.H.S.) and is designed for physicians who have had little or no formal EEG training. Inquiries about further details of the course and registration procedure should be addressed to Dr. Donald W. Klass, EEG Course Director, Mayo Clinic, Rochester, Minn.

Workshop on Drug Metabolism Will be Held on May 22 to 26

A workshop on drug metabolism will be held in Washington, D.C. on May 22 to 26 at the Department of Pharmacology of the George Washington University Medical Center.

This will be the second year that such a workshop has been organized under the auspices of the Drug Research Board of the National Academy of Sciences — National Research Council and the Pharmaceutical Manufacturers Association Foundation.

Sixth Annual Michigan Kidney Foundation Symposium June 3-4

The sixth annual Michigan Kidney Foundation Symposium will

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be held at the University of Michigan Medical Center on June and 4. Topics covered will be glomerular nephritis, urinary tract i fection, dialysis and transplantation.

A detailed program of the symposium and an application to enro may be obtained from Harry A. Towsley, M.D., Department of Pos graduate Medicine, University Hospital, Ann Arbor, Michigan 4810

ISMA Members Invited to Attend New Jersey 201st Annual Meeting

All members of ISMA are invited to attend the 201st Annu Meeting of the Medical Society of New Jersey in Haddon Ha Atlantic City, May 13 to 17.

The five-day scientific program will cover all specialties of medic practice. There is no registration fee for out-of-state, non-memb physicians. Copies of the program and other information may obtained by writing the Society at 315 W. State St., Trenton 086

International Congress on Hyperbary, Underwater Physiology

The International Congress on Hyperbary and Underwater Physi ogy will meet in Marseilles, France from May 29 to June 3.

The scientific program will cover underwater physiology and h perbaric medicine and will be simultaneously translated into Engli and French. For complete information address the Secretary of t Congress at le Corbusier — 8e rue, 13-Marseilles-8e.

Seminar on Diseases Common to Animals and Man October 4-5

Annual Midwest Interprofessional Seminar on Diseases Comm to Animals and Man will be held October 4-5 at the University Missouri, Columbia, Missouri.

For further information contact Dr. Donald C. Blenden, Depa ment of Veterinary Microbiology, Section of Public Health, School Veterinary Medicine, University of Missouri, Columbia, Missouri 652

Obstetrics, Gynecology Course Set for Denver on June 12 and 13

A postgraduate course in Obstetrics and Gynecology will be c ducted by the University of Colorado School of Medicine in Den on June 12 and 13.

The registration fee of $35 includes two buffet luncheons. Wr to Office of Postgraduate Medical Education, 4200 E. Ninth A Denver 80220.

Frontiers of Medicine Session On "Head Injuries" Will be May 10

The University of Chicago Hospitals and Clinics Committee Continuing Medical Education will sponsor a Frontiers of Medic session on "Head Injuries" May 10.

Further information may be obtained from Miss Dorothy Tay Office of the Dean, Division of the Biological Sciences, The U versity of Chicago, Chicago 60637.

Third Annual Illinois Kidney Disease Symposium October 11

The Third Annual Kidney Disease Symposium under the sp sorship of the Kidney Foundation of Illinois will be held on Octo 11 at the Sheraton-Chicago Hotel.

The Foundation's address is 127 N. Dearborn St., Suite Chicago 60602.

County, District News

Allen

The Allen County Medical Society met Feb. 7 to hear Dr. William H. Masters, Director of the Reproductive Biology Research Foundation at St. Louis, speak on "The Rapid Treatment of Human Sexual Inadequacy." There were 181 present.

Boone

Dr. Robert Wiseheart has been re-elected president; Dr. Donald Boyer re-elected vice-president and Dr. James R. McAfee re-elected secretary-treasurer of the Boone County Medical Society.

Cass

The Rev. Frank Little, Clyde Mayfield and Father Eder, from Longcliff State Hospital, spoke on the Pastoral Counseling Service Center in Logansport at the Feb. 6 meeting of the Cass County Medical Society. The speakers gave background information and spoke of the purpose and function of the center. Thirty-five members and guests attended.

DuBois

Newly-elected officers of the DuBois County Medical Society are: Drs. Francis Gootee, Jasper, president; J. P. Salb, Jasper, vice-president and Herbert G. Erhart, Ferdinand, secretary-treasurer. Dr. Gootee will serve as delegate and Dr. John Barrow, Dale, as alternate.

Elkhart

New officers of the Elkhart County Medical Society are: Drs. T. D. Arlook, Elkhart, president; Philip Bowser, Goshen, vice-president; and Page E. Spray, Elkhart, secretary-treasurer.

Grant

Speaker at the Feb. 28 meeting of the Grant County Medical Society was Abraham Zuckerman, Chief of Social Work Service of the Veterans Administration, Marion. His topic was "Admission Policy."

Hamilton

Capt. Charles Davis, of the Indiana State Police crime laboratory, spoke on "Crime Detection as it Applies to Medicine" at the Feb. 14 meeting of the Hamilton County Medical Society. Twenty members and guests attended.

Harrison-Crawford

Dr. W. J. Brockman is the new president; Dr. Carl Dillman the new vice-president and Dr. D. J. Dukes, secretary-treasurer, of the Harrison-Crawford County Medical Society. All of the new officers are from Corydon.

Henry

Speakers at the Feb. 16 meeting of the Henry County Medical Society were Dr. Richard Childress and Dr. Allen Lieberson of the Indiana University Medical Center. They spoke on the application of pulmonary angiography and the diagnosis of pulmonary lesions.

Lake

Dr. D. B. Templin, Lowell, has been elected president of the Lake County Medical Society for 1967. Other new officers are Drs. S. W. Shapiro, Munster, vice-president and R. R. Barton, Gary, secretary-treasurer.

Morgan

Dr. E. T. Drake is the new president and Dr. M. A. Turner the secretary-treasurer of the Morgan County Medical Society. Both are from Martinsville.

Parke-Vermillion

"Hormones" was the topic chosen by Dr. Edward M. Johnson, Terre Haute, when he spoke at the Feb. 15 meeting of the Parke-Vermillion County Medical Society.

Randolph

Dr. Howard W. Koch is the new president and Dr. Paul W. Sparks the secretary-treasurer of the Randolph County Medical Society. Both of the new officers are from Winchester.

Ripley

Dr. Bill E. Freeland, Batesville, has been re-elected president and Dr. William J. Warn, Milan, re-elected secretary-treasurer of the Ripley County Medical Society.

Rush

Dr. Charles Warneke, Indianapolis, spoke at the Feb. 14 meeting of the Rush County Medical Society on "Orthopedics of General Practice." New officers of the county society are: Drs. Stephen Smith, Knightstown, president; C. Willard Worth, Milroy, vice-president and Charles Sheets, Manilla, secretary-treasurer.

Tippecanoe

"Saving Tax Dollars Through Medical Corporations" was the topic of Elmer Lyon when he spoke at the Feb. 14 meeting of the Tippecanoe County Medical Society.

Vanderburgh

The Feb. 9 meeting of the Vanderburgh County Medical Society was held jointly with the I.A.G.P. Road Show. Speakers included Drs. Robert N. Greenblatt and James E. Dalen.

Warrick

Officers of the Warrick County Medical Society have been announced. They are: Drs. Peter B. Hoover, Boonville, president; Robert H. Terry, Boonville, vice-president and Robert C. Colvin, Newburgh, secretary-treasurer.

Washington

Dr. A. R. Episcopo is the new president; Dr. Eddie R. Apple, the new vice-president and Dr. Roy L. Fultz the new secretary-treasurer of the Washington County Medical Society. All are from Salem.

Wayne-Union

Dr. Richard DeWall, consulting surgeon at Kettering Hospital, Dayton, Ohio, spoke on "Cardiovascular Surgery" at the Feb. 14 meeting of the Wayne-Union County Medical Society.

Wells

Dr. Richard Willard, Bluffton, gave a report on the Commission on Voluntary Health Agencies at the Feb. 20 meeting of the Wells County Medical Society. ◄

Deaths

George W. Bowman, M.D.

Dr. George W. Bowman, 77, public health director for the Indiana State Board of Health, died March 8 in Methodist Hospital, Indianapolis.

Graduated from the I.U. School of Medicine in 1912, Dr. Bowman was a veteran of the Mexican Border War and World War I. During World War I he was chief of the venereal disease section in the office of the U.S. Surgeon General with the rank of major. He was a member of the Marion County Medical Society.

Frank F. Forry, M.D.

Dr. Frank F. Forry, professor emeritus of pathology at the I.U. School of Medicine, died Feb. 5 at the age of 80.

Dr. Forry was organizer, founder and chairman for many years of the Indiana Association of Pathology and was organizer and first chairman of the I.U. School of Medicine Pathology Department. He had been active for more than 20 years in the tumor clinic at the I.U. Medical Center. He was graduated from the I.U. School of Medicine in 1923 and became an instructor at the medical school. Retired in 1957, Dr. Forry was a Senior Member of ISMA and a member of the Marion County Medical Society.

Ira Faith, M.D.

Dr. Ira L. Faith, 45, Evansville physician, died Jan. 28 in Gatlingburg, Tenn., after he had gone on a skiing trip.

Graduated from the I.U. School of Medicine in 1944, Dr. Faith began the practice of medicine in Newburgh and Boonville. He was a member of the Vanderburgh County Medical Society, and served on the staffs of the Deaconess, St. Mary's and Welborn Baptist Hospitals.

John M. Kercheval, M.D.

Dr. John M. Kercheval, 67, practicing physician at Clinton since 1945, died Feb. 12 at his home.

Vermillion county and Clinton city health officer for more than eight years, Dr. Kercheval was also Parke-Vermillion County Society secretary and an ISMA delegate. He was graduated from the I.U. School of Medicine in 1925, practiced at Wolcottville and later was associated with the Veterans Administration before going to Clinton. He was also chief of staff at the Vermillion County Hospital, Clinton.

Maurice M. Manalan, M.D.

Dr. Maurice M. Manalan, chief of radiology at the West 10th Street Veterans Administration Hospital, died Feb. 26 at Indianapolis. He was 48.

Born at Gary, Dr. Manalan was graduated from the I.U. School of Medicine in 1944 and had been an Indianapolis resident 26 years. He served with the United States Army in World War II, was on the staffs of Community Hospital and the I.U. Medical Center and was a member of the Marion County Medical Society.

Arthur E. Moravec, M.D.

Dr. Arthur E. Moravec, Fort Wayne general practitioner for more than 35 years, died Feb. 7 at the age of 61.

Graduated in 1929 from the University of Iowa Medical School, Dr. Moravec was a member of the staff of the Lutheran Hospital and on the courtesy staff at both Parkview Memorial and St. Joseph's Hospitals. He served in the Navy in World War II and was a member of the Allen County Medical Society.

Robert A. Staff, M.D.

Dr. Robert A. Staff, 62, Terre Haute physician, died March 4 at St. Anthony Hospital.

A member of the Parke-Vermillion Count Medical Society, Dr. Staff was a veteran o World War II, was graduated from th I.U. School of Medicine in 1930 and ha been a flight surgeon for the U.S. Ai Force for four years. He was a former su perintendent of the Tuberculosis Hospital i Richmond.

Jule O. Wehrman, M.D.

Dr. Jule O. Wehrman, 92, retired Indi anapolis physician, died Feb. 5 in an Ind anapolis nursing home.

Graduated from the Chicago Homeopathi College in 1897, Dr. Wehrman was th second physician to establish offices in th Hume Mansur Building in Indianapolis. H was a Senior Member of ISMA, a member o the 50-Year Club and a member of th Marion County Medical Society.

John B. Westfall, M.D.

Dr. John B. Westfall, 50, Indianapoli ophthalmologist, died Feb. 20 while va cationing in Las Vegas.

Graduated from the I.U. School of Med cine in 1942, Dr. Westfall was a veteran o World War II, serving in the U.S. Arm Medical Corps in the South Pacific. He wa a member of the Marion County Medica Society.

Charles Wilhelmus, M.D.

Dr. Charles Wilhelmus, Newburgh phys cian for more than a half a century, die Feb. 8 at the age of 86.

A physician for 60 years, Dr. Wilhelmu spent all but two years of this time i Warrick County and the surrounding are He retired last October. He was a pa health officer of Warrick County and ha served in different capacities as an offic of its medical society. He was a staff membe at St. Mary's, Deaconess and Baptist Ho pitals in Evansville; a Senior Member ISMA and a member of the 50-Year Club.

Association News

EXECUTIVE COMMITTEE

February 25, 1967

Present: Ralph V. Everly, M.D., chairman; Burton E. Kintner, M.D.; Eugene S. Shifner, M.D.; G. O. Larson, M.D.; Lowell A. Steen, M.D.; Ottis N. Olvey, M.D., Lester L. Hoyt, M.D.

Frank B. Ramsey, M.D., editor of *The Journal*, and James A. Waggener, executive secretary.

Mr. Richard C. Kilborn and Dr. Glen V. Ryan appeared before the committee to seek permission of the association for Blue Shield to proceed to work to obtain the contract as the administrator of Title XIX for the state of Indiana. Following discussion, upon motion of Drs. Larson and Steen, the Executive Committee authorized Blue Shield to bid for the contract for acting as administrator of Title XIX, when implemented in Indiana.

Dr. Ryan stated that the Executive Committee of the Blue Shield Board had been discussing bringing certain titles of the organization into conformity with other Blue Shield Plans and requested permission of the association to propose to the Blue Shield Board that Dr. Ryan's title as President of Blue Shield be changed to Chairman of the Blue Shield Board and that Mr. Kilborn's title of Executive Vice President be changed to just President. Following discussion of this matter, on motion of Drs. Steen and Shifner, the proposal was approved by the committee. Dr. Ryan and Mr. Kilborn then left the meeting.

Minutes of the meeting held January 21, 1967, were approved on motion of Drs. Steen and Larson.

Membership Report

Number of members as of December 31, 1966	4,409
1967 members as of January 31, 1967:	
Full dues paying	2,001
Residents and interns	64
Council remitted	36
Senior	297
Honorary	3
Military	34
Total 1967 members as of January 31, 1967	2,435
Number of members as of January 31, 1966	2,825
Loss over last year	390
Number of AMA members as of January 31, 1967	2,417
Total 1966 AMA members as of January 31, 1966	2,774
Loss over last year	357
1967 AMA members:	
Dues paying	2,001
Exempt, but active	416
	2,417
Number who have paid state dues but not AMA dues as of January 31, 1967	18
1967 members as of February 24, 1967, in addition to above report:	
Full dues paying	824
Senior	4
Council remitted	7
Interns and residents	13
Military	5
	853

Headquarters Office

The secretary announced that Dr. F. J. L. Blasingame, executive vice president of the American Medical Association, would be in the city on Wednesday, March 1, and it was proposed that the Executive Committee might like to meet with him at the headquarters building at 10:00 a.m. on that day. It was agreed that as many as possible would be present to meet with Dr. Blasingame.

Treasurer's Office

The treasurer's report on statements for January 31, 1967, and statement of cash and fund balances was approved by consent.

Building Matters

Memorandum from Dr. James Gosman was reviewed and Dr. Everly is to discuss further the contents of this memorandum with Dr. Gosman.

Legislation

National: The secretary reported on several matters currently pending before the Congress, particularly the memorandum on PL 89-749, and also a memorandum from the AMA concerning the Health Manpower program. The secretary was instructed, by consent, to refer these matters to the Commission on Public Health, the Commission on Governmental Medical Services and the Commission on Legislation for their information.

A letter from Dr. E. B. Howard concerning additional membership on the Health Manpower Committee of the AMA was read for the information of the committee.

Concerning various matters which are currently being discussed at the national level which would involve the medical profession, the secretary reported on a prospective new employee of the association and on motion of Drs. Larson and Steen, the secretary was instructed to make an effort to employ this individual.

Local: The secretary reported on various bills before the State Legislature and reviewed the bills that the association had introduced. The president announced that he had been invited to attend the signing of the TB Testing Bill by the governor. It was agreed that if it was not possible for the president to be present on this occasion, Dr. Everly would represent the association.

Organization Matters

The secretary reported that the supply of plaques, presented to retiring presidents, was exhausted and that he had a quotation for additional plaques at $56.00 each. Upon motion of Drs. Steen and Kintner, the secretary was authorized to procure an additional twelve plaques.

The request of the American Cancer Society for use of the mailing list was approved on motion of Drs. Steen and Larson.

The request of the Indiana University School of Medicine, Public Relations Department, for use of the mailing list was approved on motion of Drs. Steen and Larson.

The request of the Kentucky Arthritis Foundation for use of the mailing list was approved on motion of Drs. Kintner and Steen.

The request of the Indiana State Association of Medical Assistants for approval of two changes in its Constitution and Bylaws was approved on motion of Dr. Larson and taken by consent.

A letter from the Indiana Academy of Science seeking financial assistance of the association in transporting the regional winners to the International Science Fair was discussed and by consent the secretary was instructed to notify this organization that it should look to the local level for financial assistance.

On motion of Drs. Steen and Olvey, a membership of $100.00 in the United States Chamber of Commerce was approved.

A letter from Dr. Marvin Priddy, chairman of the Commission on Special Activities, concerning the orientation program was reviewed and by consent Dr. Priddy was to be informed that the idea of having a dinner and a meeting of new members as an orientation program was approved by the Executive Committee.

A letter from the Continental Casualty Company in which the company promised to make its program available to all physicians, regardless of physical condition, was read for the information of the committee.

The committee reviewed the report of the Commission on Voluntary Health Agencies in which the request of Mr. T. Leonard Terry, manager of The Mutual Life Insurance Company of New York, South Bend office, to establish a Medic Alert program had been approved by the commission. By consent this information is to be transmitted to Mr. Terry.

A letter from the Lake County Society concerning support of Citizens for Happy Family Living was discussed and the Lake County Medical Society is to be advised that

if it is interested in promoting this project, it should be done by a resolution presented to the Council or to the House of Delegates.

A letter from the Health Insurance Council requesting the association's opinion on the use of laboratory facilities by a physician was discussed and Dr. Lowell Steen, chairman of the Council, is to make an investigation into this matter.

Request of the Commission on Public Health concerning whether or not it would be advisable for the commission to attempt to establish a health fair, to be conducted simultaneously with the annual state convention in October, was reviewed. The chairman of the commission is to be informed that the Executive Committee thinks the idea has merit but, in order to give the commission more time to plan for such an event, that it not be attempted this year but that it be kept in mind for a future state convention.

The chairman reported on his attendance at a meeting on February 1 at the State Board of Health concerning community-based utilization review committees. He reported that the consensus of the group was that it would be necessary for a utilization committee to be formed at the state level in order to assist those communities not able to organize their own utilization committees. Upon motion of Dr. Steen, taken by consent, the committee decided to go along with this proposal.

A letter from the Floyd County Medical Society and correspondence from several residents of that community were brought to the attention of the committee and this was taken as a matter of information.

A letter from Dr. Steen concerning the association becoming more active in the field of medicine and religion was reviewed and on motion of Dr. Steen, taken by consent, this matter was to be referred to the Commission on Inter-Professional Relations for implementation.

The committee discussed the fact that Dr. Otis Bowen is the fourth physician to be honored by election as speaker of the House of Representatives, and by consent it was agreed that recognition should be made of this. The secretary was instructed to procure an appropriate plaque for mounting in an appropriate location in the headquarters office, with a miniature of the plaque to be given personally to Dr. Bowen.

Journal

A proposal for increasing the advertising rates in *The Journal* was reviewed and the proposal was approved on motion of Drs. Larson and Rifner.

A letter from the Associated Credit Bureaus requesting the privilege of advertising in *The Journal of the Indiana State Medical Association* was presented and on motion of Dr. Larson, taken by consent, the submitted advertisement was approved for insertion.

Future Meetings

Liaison Fellow Meeting, American College of Surgeons, Chicago, February 25, 1967. By consent it was agreed that no representative would be sent to this meeting.

National Medicolegal Symposium, sponsored by the American Medical Association and the American Bar Association, Miami Beach, Florida, March 9-11, 1967. By consent it was agreed that Dr. Herman Wing would be named the official representative of the association to this meeting.

A letter concerning a nursing conference sponsored by the AMA Committee on Nursing, to be held in Chicago, October 1967, was reviewed but no action was taken. This is to be discussed at the next meeting of the committee.

New Business

The chairman presented a letter from Pitman-Moore concerning the addition to their staff of a Dr. James E. Bowes and offering his services to the association in any way he could help in immunization programs. This was presented for the information of the committee.

There being no further business the committee adjourned, to meet again at 4:00 p.m., Saturday, March 18, 1967.

Sex Education Expert to be Featured Speaker at Auxiliary Convention

Mary Calderone, M.D., noted proponent of sex education, will be one of the speakers at the 44th Annual Convention of the Woman's Auxiliary to the AMA, June 18-22, in Atlantic City. Convention headquarters will be the Shelburne Hotel.

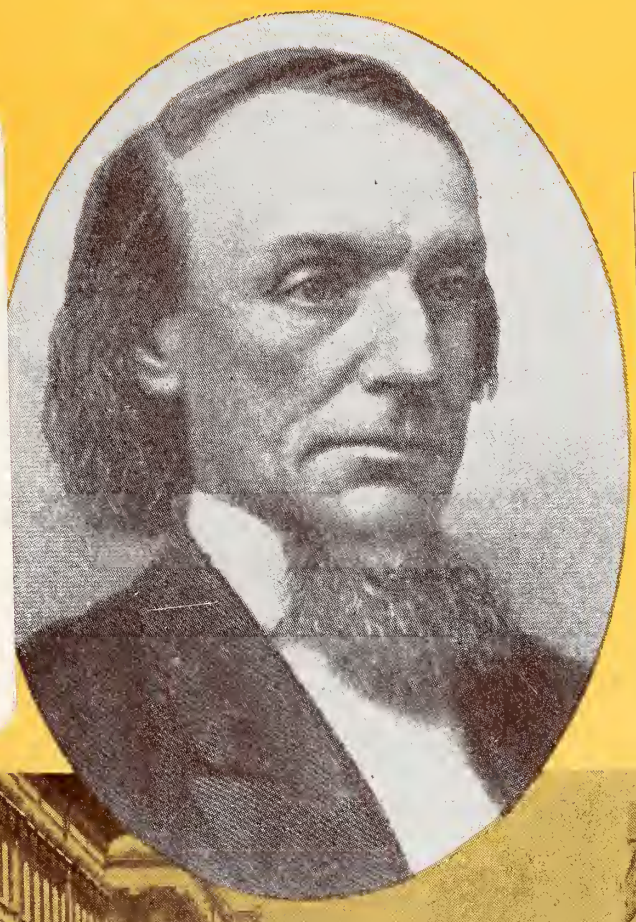
Dr. Calderone's talk, "Sex Education: Goals and Means," is scheduled for Tuesday morning, June 20. Also speaking on Tuesday will be Charles L. Hudson, M.D., AMA president. Dr. Hudson's talk will be made at the luncheon honoring auxiliary past presidents and AMA officers and trustees.

Vol. 60 • No. 5 Indianapolis, Indiana • May, 1967

The JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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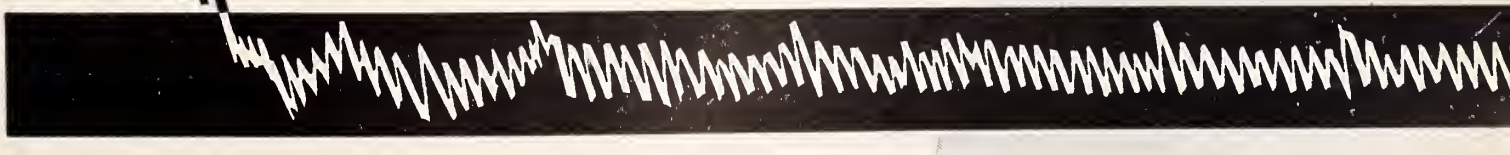
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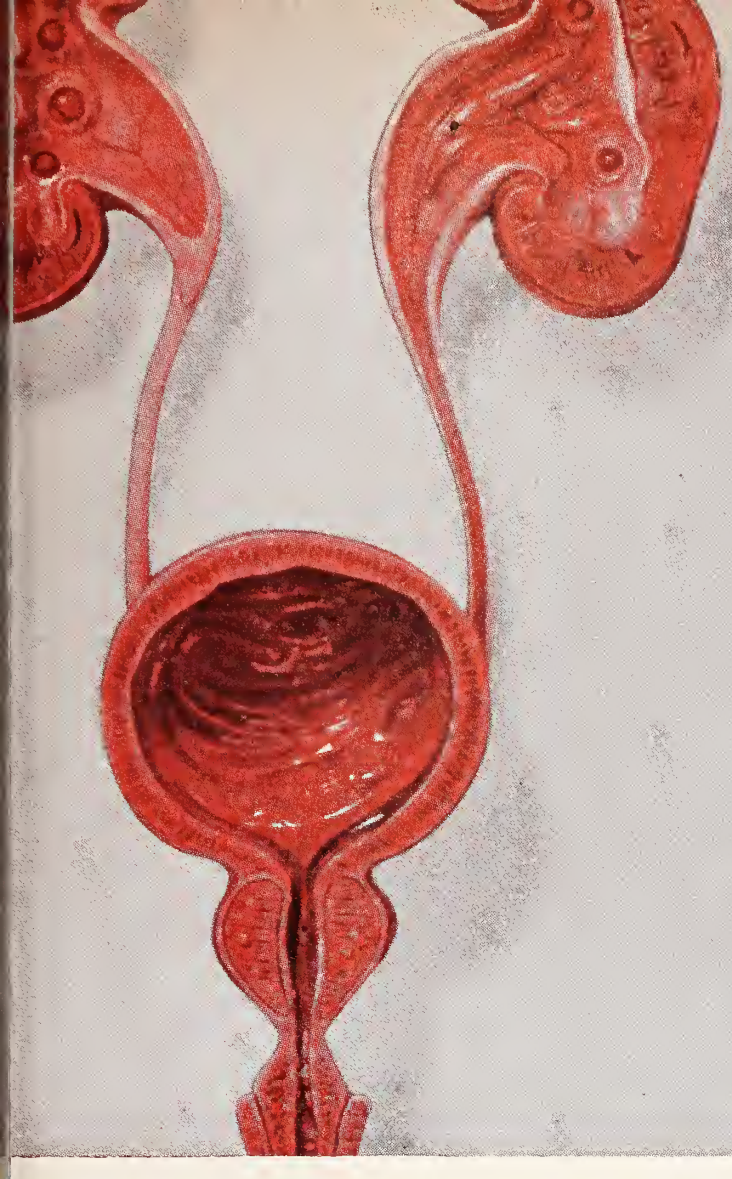
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1—P. J. V. Carcaran, Evansville	Oct. 1968
2—Jae Dukes, Dugger	Oct. 1969
3—Danald M. Kerr, Bedford	Oct. 1967
4—Rabert M. Reid, Columbus	Oct. 1968
5—Wilbert McIntash, Riley	Oct. 1969
6—William R. Tindall, Shelbyville	Oct. 1967
7—Albert M. Donata, Indianapolis	Oct. 1968
8—Danald R. Taylor, Muncie	Oct. 1969
9—Peter R. Petrich, Attica	Oct. 1967
10—Lawell H. Steen, Whiting (Chairman)	Oct. 1968
11—Lowell Hillis, Lagansport	Oct. 1969
12—Miltan F. Popp, Fort Wayne	Oct. 1967
13—Otis R. Bawen, Bremen	Oct. 1968

ALTERNATE COUNCILORS

District	Term Expires
1—Gilbert M. Wilhelmus, Evansville	1967
2—	
3—Elmer L. Wallace, New Albany	1968
4—Jack E. Shields, Brawnstown	1967
5—A. W. Cavins, Terre Haute	1967
6—Frank Green, Rushville	1969
7—John O. Butler, Indianapolis	1969
8—Paul Sparks, Winchester	1967
9—Clarence G. Kern, Lebanon	Fall, 1968
10—Herman Wing, Gary	1969
11—James A. Harshman, Kokama	1969
12—William Clark, Fort Wayne	Spring, 1968
13—George B. Gattman, Elkhart	1967

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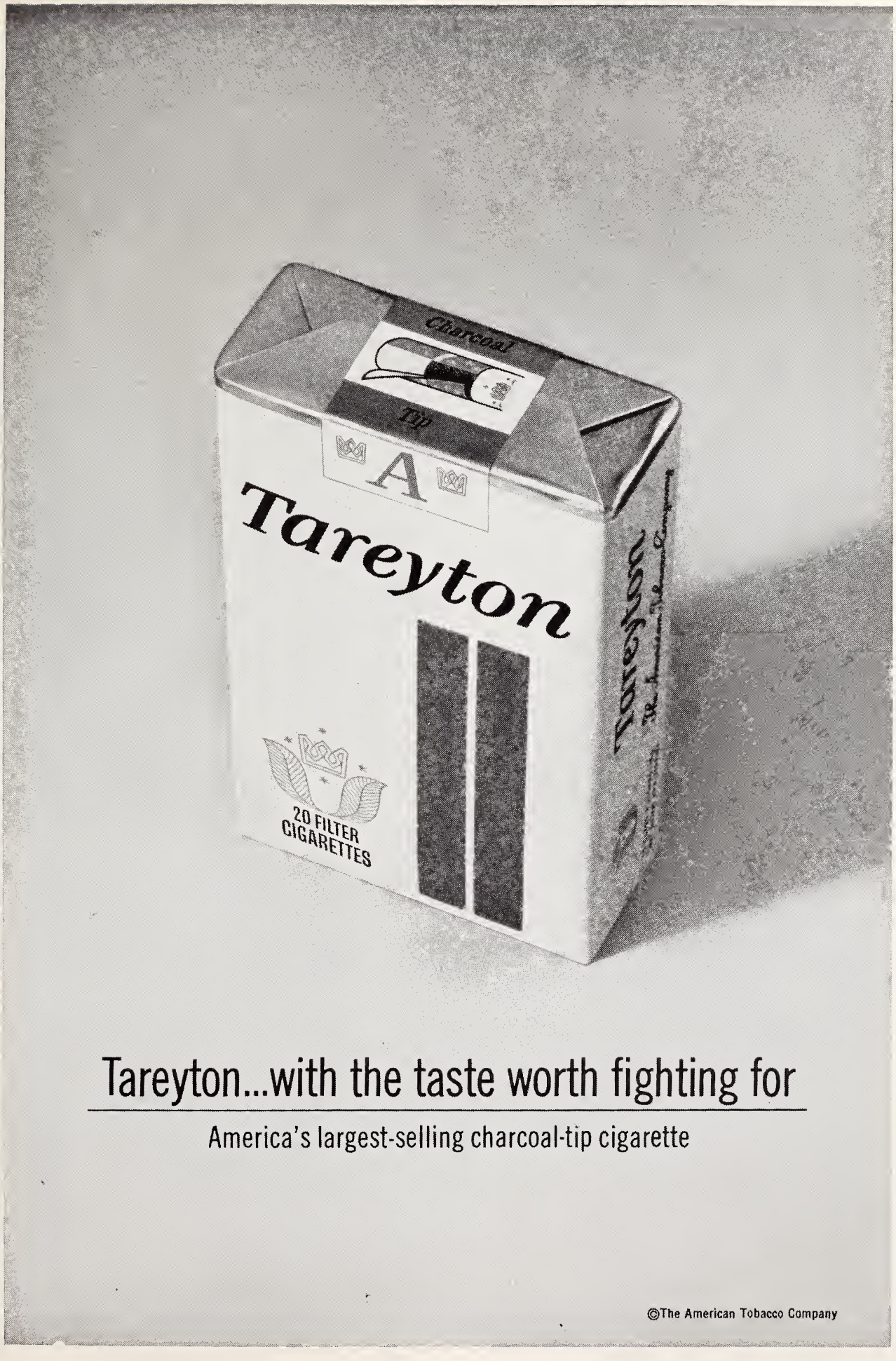
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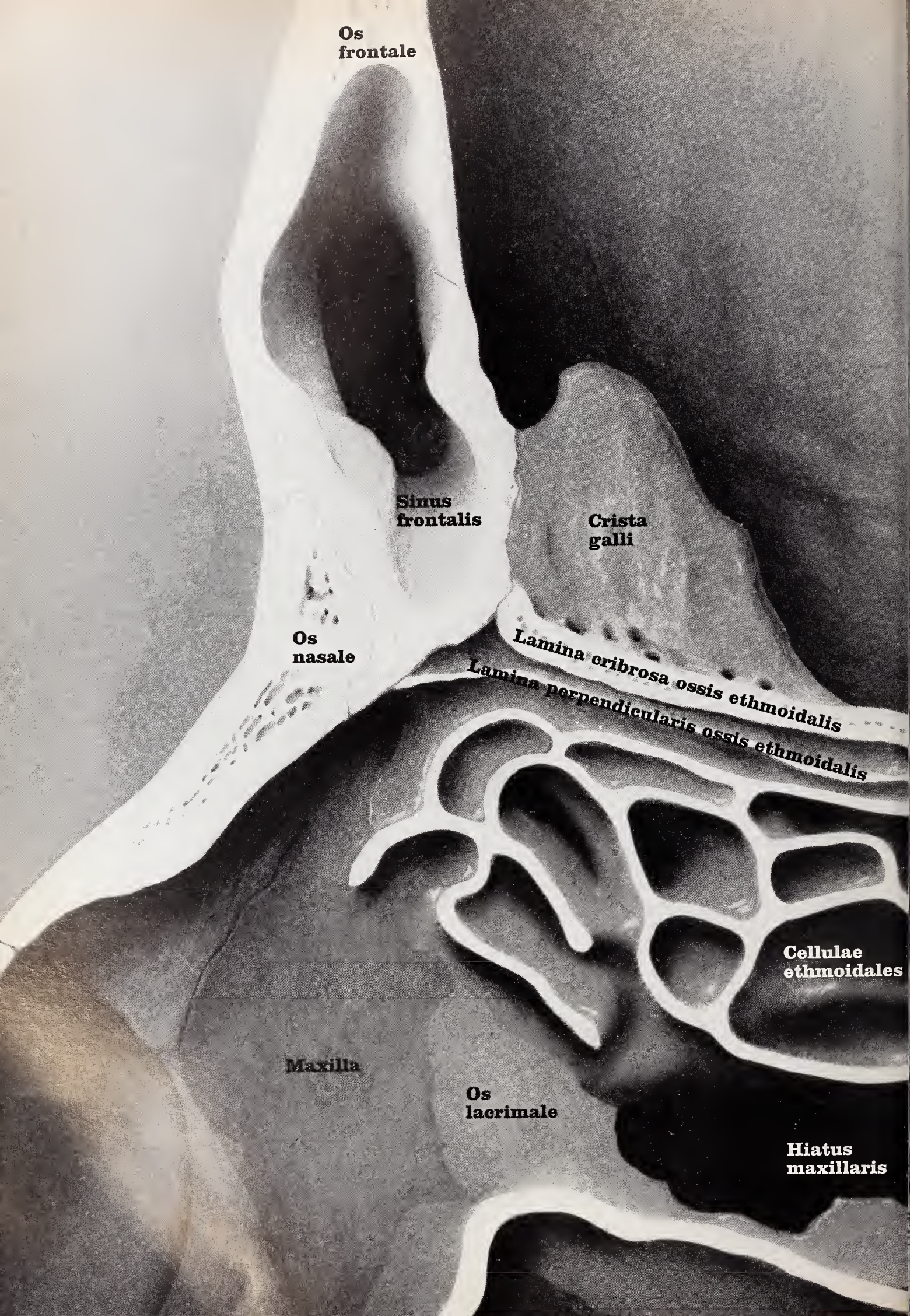
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Jack E. Shields Brownstown	Dwight W. Schuster Indianapolis

Terms expire December 31, 1968:

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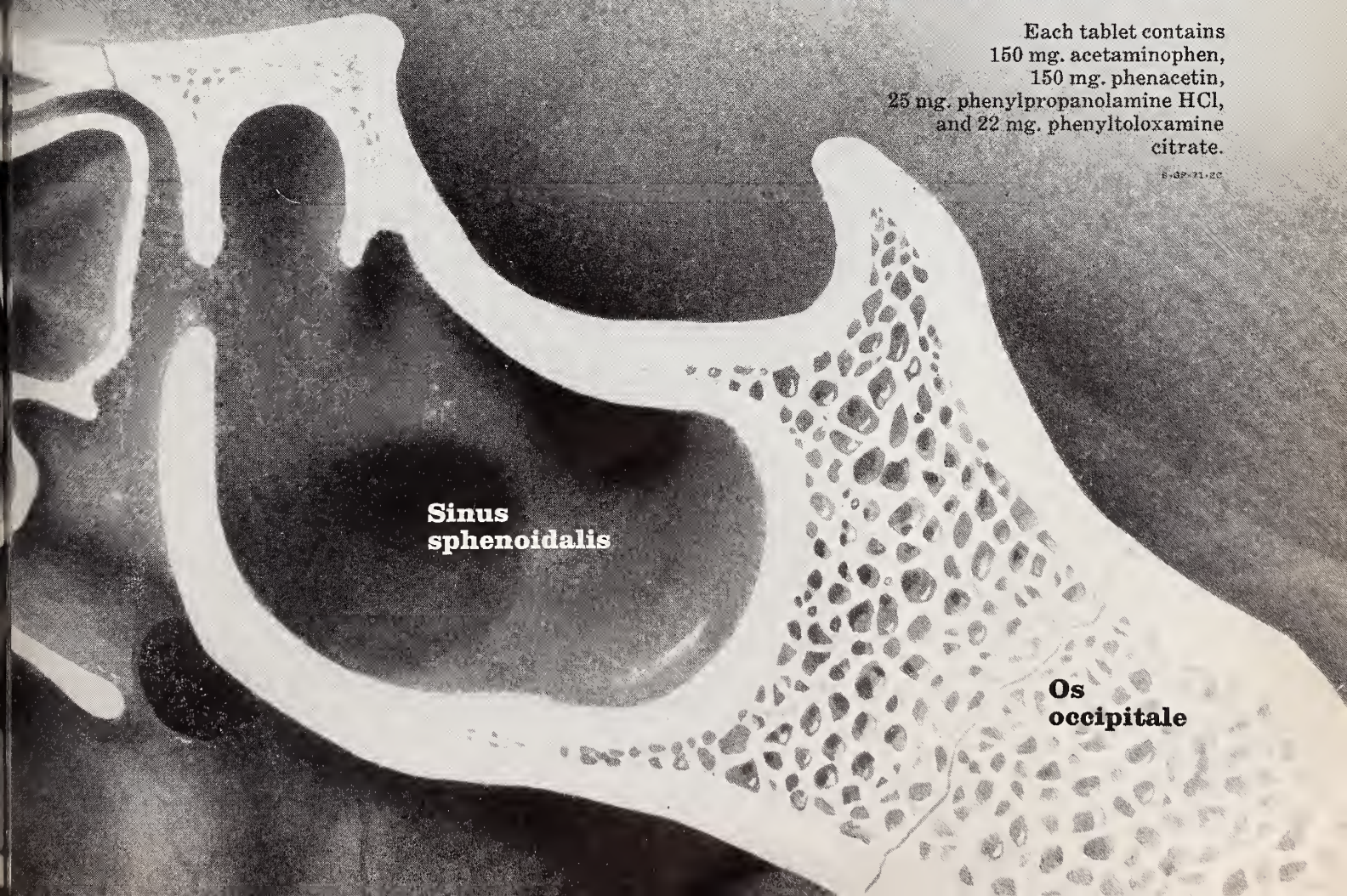
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25 mg. phenylpropanolamine HCl,
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8-SP-71-2C



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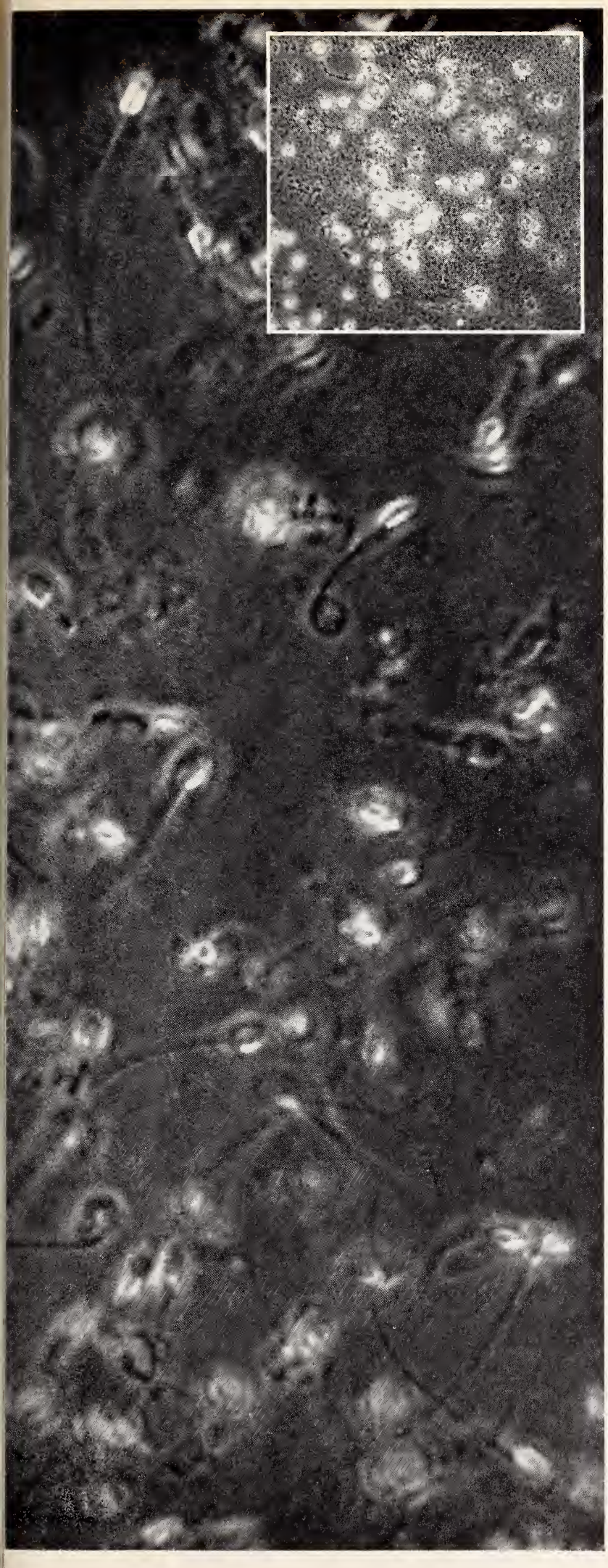
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12.	Warren L. Niccum, Columbia City	Kenneth F. Isenogle, Fort Wayne	Fort Wayne, May 17, 1967
13.	Gordon Cook, South Bend	John Hildebrand, South Bend	South Bend, Sept. 27, 1967



New view of an oral contraceptive at work

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1—which provide the combined action of both low-dosage progestogen and estrogen for the full treatment cycle—offer multiple contraceptive action that helps explain their unexcelled record of effectiveness. This report explores the secondary protective mechanisms against unwanted pregnancy offered by combined hormonal administration and the importance of the progestational agent in making such multiple contraceptive action possible.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has an adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) reverses the usual midcycle picture of a thin, watery cervical mucus. The result—a built-in barrier that inhibits sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

See last page for contraindications, precautions, side effects and dosage.

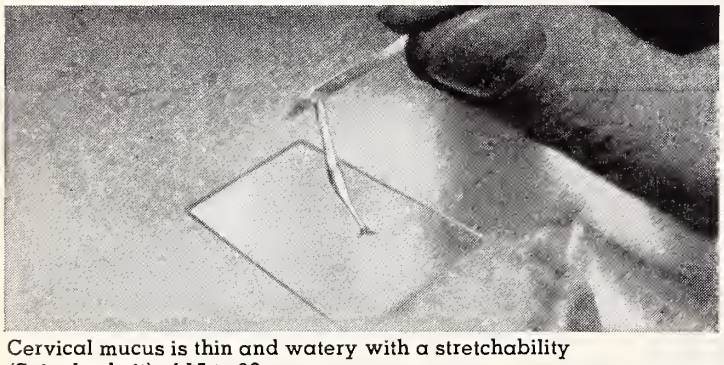
How the estrogen-opposing action of Norinyl-1 creates a hostile cervical mucus

Normally estrogen activity during the fertile midcycle stimulates the production of cervical mucus. The mucus at this time is profuse and watery—allowing maximum sperm motility and promoting penetration.
But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that diminishes the vitality of the sperm and impairs its powers of penetration.

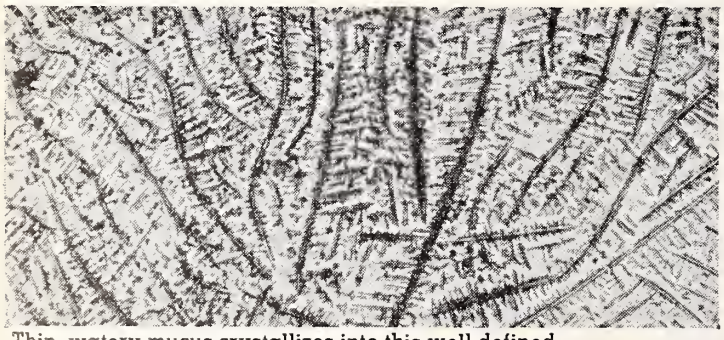
How hostile cervical mucus supports contraceptive action

The importance of these observations to the effectiveness of Norinyl-1 has been noted in a report on 89 patients taking this medication.* In all instances, cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit. In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception. *Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

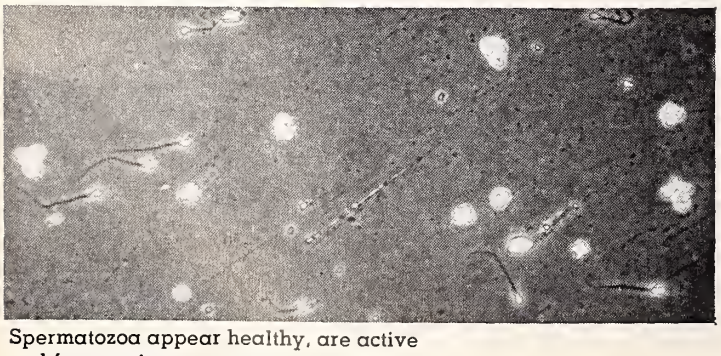
Normal cervical mucus at midcycle in untreated patient permits sperm motility... promotes sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.



Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

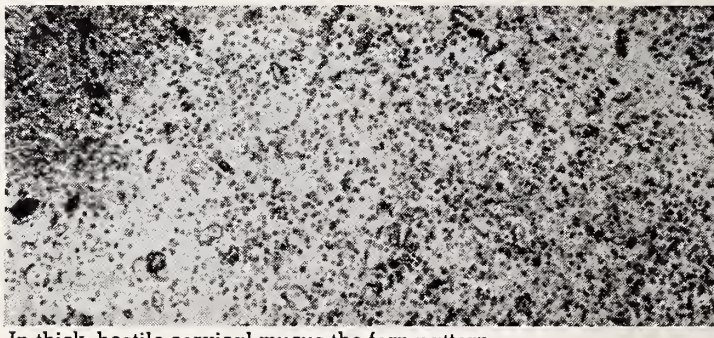


Spermatozoa appear healthy, are active and freemoving.

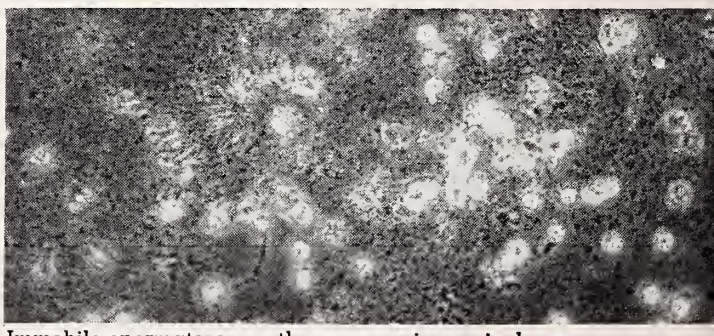
Hostile cervical mucus at midcycle produced by Norinyl-1 impairs sperm vitality... inhibits penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, hostile cervical mucus the fern pattern is poorly defined or absent.

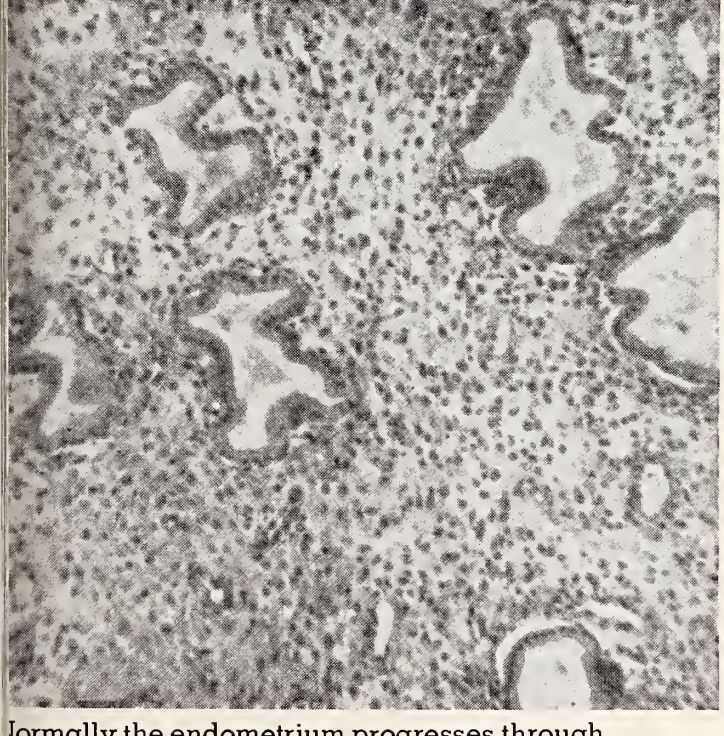


Immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

An endometrium unreceptive to nidation– another supporting contraceptive action of Norinyl-1

Let us suppose that an ovum is released—as occurs in an occasional, rare case—and somehow a sperm succeeds in penetrating the cervical mucus barrier? Should this come about, one additional action of Norinyl-1 may protect the patient from unwanted pregnancy—progestogen intake makes endometrial tissue unreceptive to implantation.

Endometrium of untreated patient



Normally the endometrium progresses through a proliferative phase stimulated by estrogen and a secretory phase stimulated by progesterone. During the secretory phase the endometrium is receptive to the fertilized ovum.

Unreceptive endometrium produced by Norinyl-1



When Norinyl-1 is administered its progestogen component—norethindrone—accelerates the secretory phase, suppressing glandular development. From day 11 on, secretory action is no longer present. The result is that during the latter half of the cycle the endometrium becomes unreceptive to egg implantation.

See last page for contraindications, precautions, side effects and dosage.

new Norinyl®-1 tablets

(norethindrone 1mg ē mestranol 0.05mg.)

for multiple contraceptive action

effective fertility control
on half the previous dosage

maintains ratio
of the established
norethindrone/mestranol
combination

lower cost

new Norinyl-1®

(norethindrone 1mg. c̄ mestranol 0.05mg.) **tablets**

Reduction of oral contraceptive dosage to lowest effective levels ha become a well-accepted principle of conservative medical practic In keeping with this view, Norinyl is now available in a new strengt in which *both* norethindrone and mestranol are reduced 50 percer Studies show that Norinyl-1 achieves fertility control with only 1.0 mg. of combined progestogen and estrogen per tablet.

Norethindrone was first reported for use as a progestational agent i human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., a an oral contraceptive, is currently in use by over 2,000,000 wome Clinical experience now establishes that Norinyl-1 also amply meet the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-1 in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-1. Therefore, if such tests are abnormal in a patient taking Norinyl-1, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neurooocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: i creased bromsulphalein retention and oth hepatic function tests, coagulation tests (i crease in prothrombin, factors VII, VIII, IX an X), thyroid function (increase in PBI and bu nol extractable protein-bound iodine and c crease in T^3 values), metapyrone test, pregna diol determination.

Other side effects reported to have occurr in association with use of this drug are di ness, hirsutism, pains in legs, back, chest a abdomen, dysuria, drowsiness, vaginal d charge, libido increased and decreased, er tions, hypermenorrhea, hypomenorrh increased appetite, G.U. infections, varico veins, abdominal fullness, acne, headac nervousness, allergies, blurred vision, pain eyes, and itching in eyes. *For complete clinic data, see package insert.*

Dosage and Administration: 1. One tablet Norinyl-1 is administered orally for 20 da beginning on day 5 of the menstrual cy (Count day 1 of the cycle as the first day menstrual bleeding.) Repeat this dosage sch ule for each cycle. 2. If no menstrual peri occurs after a cycle of treatment (20 tablets) which patient adhered to the schedule, the tient must be instructed to resume taking t Norinyl-1 tablets 7 days after the previous day course was completed. For example, if t last pill of a previous cycle had been taken a Sunday, then a new cycle of treatment sho begin on the following Sunday. 3. In the p partum woman, it is recommended that t first cycle of treatment should begin on da of the first menstrual cycle. However, Norin should not be administered during lactation.

Availability: Norinyl-1 (norethindrone 1 with mestranol 0.05 mg.)—Dispensers of 20 a 60 and bottles of 250 tablets.

norethindrone — an original steroid from

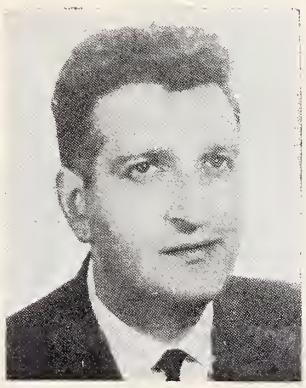
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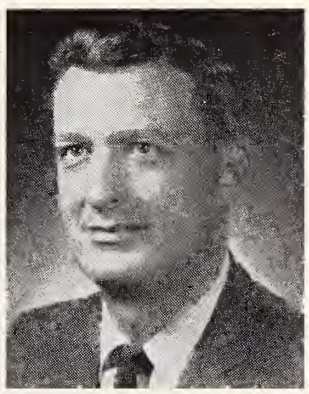
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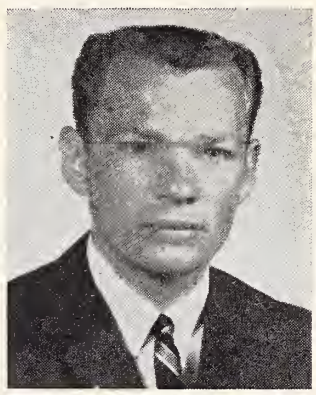
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INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

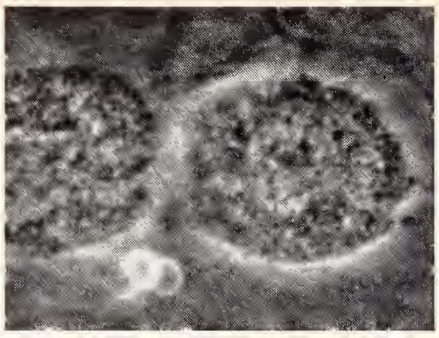


Visual evidence of how corticosteroids influence the inflammatory reaction

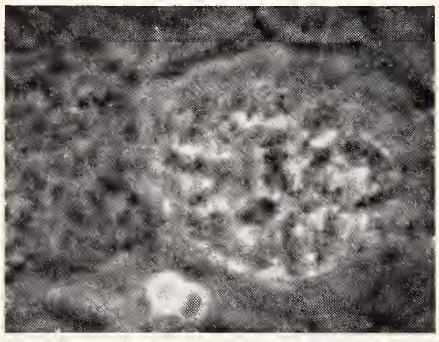
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



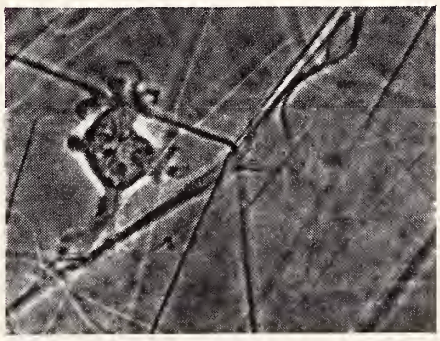
Phase-contrast microscopy showing mast cell before injury.



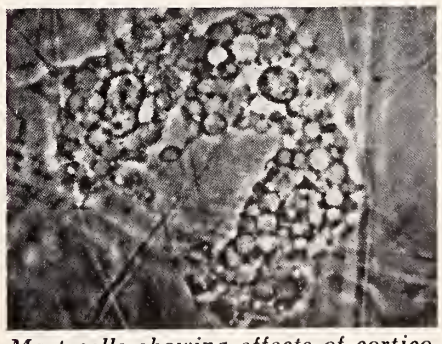
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

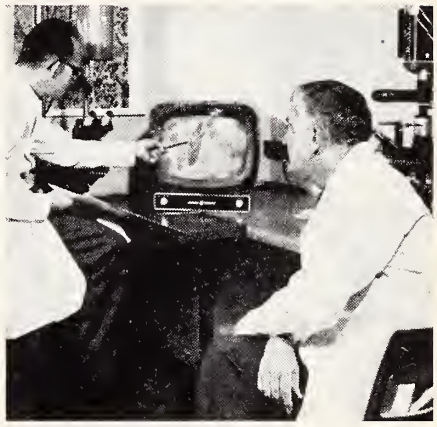
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



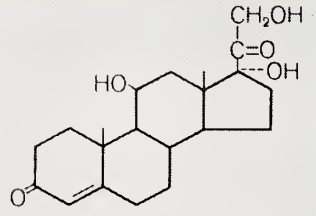
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses*, a film based on this study, is now available from your Syntex representative.

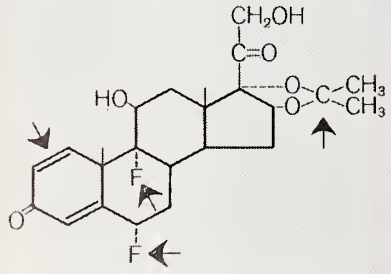
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

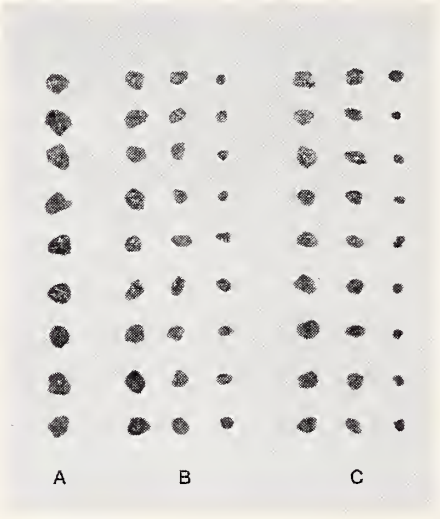


Fluocinolone Acetonide (Synalar)

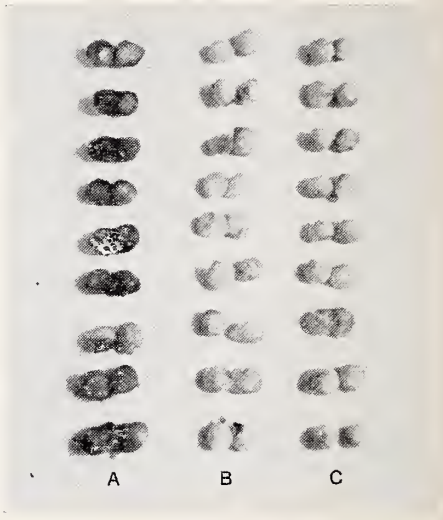
- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Bornan, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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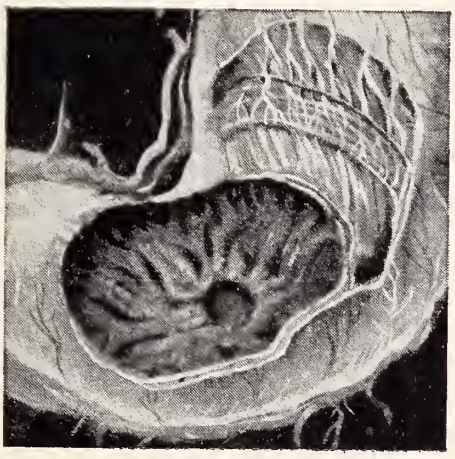
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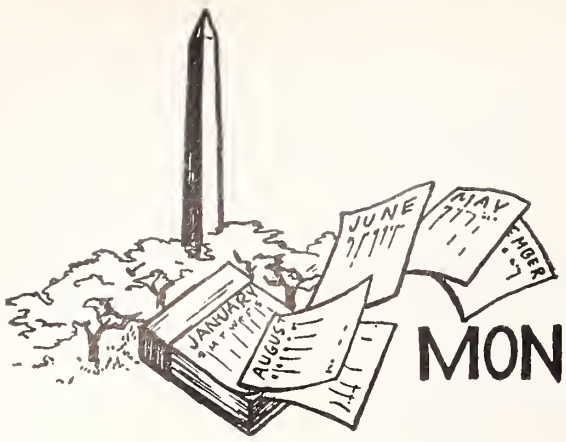
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This summary of what is happening in Washington is prepared by AMA's Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D.C.—The American Medical Association favors utilizing medicaid instead of expanding medicare.

DR. CHARLES HUDSON, AMA president, outlined the association's position at a House Ways & Means Committee hearing on the Administration's bill "Social Security Amendments of 1967" (H.R. 5710). He was accompanied by Dr. Milford O. Rouse, AMA president-elect.

"AVAILABLE tax funds should be used to give maximum health care to those who need help," Dr. Hudson said. "Expenditure of public funds on those who do not need help limits the resources available to those who do need it. . . .

"WE BELIEVE that a properly administered Title 19 (medicaid) with realistic criteria of eligibility designed for economically disadvantaged persons, plus the encouragement and improvement of voluntary health insurance and prepayment plans for the solvent, provide the best approach to health care financing."

DR. HUDSON said AMA representatives would be glad to meet with the committee and other interested parties to hammer out a workable approach to solving the many complex problems in the medicare program, particularly as concerns its Plan B.

"UNFORTUNATELY, Part B did not receive an amount of public or congressional debate warranted by the nature and scope of the proposal," he said. "This committee is now confronted with many problems inherent in the vast undertaking of the federal government in becoming directly involved in the total health care of almost 20 million persons.

"WE believe it is possible for the Congress, the medical profession and others interested in the subject to develop a new mechanism for delivering medical care to people over 65 that would be more consistent with existing private sector mechanisms. . . ."

DR. HUDSON said that carriers, physicians, patients and the government all are dissatisfied for various reasons with Part B. He said one possible solution might be to substitute for the Part B program a subsidy to all eligible persons for the purchase of private insurance.

HIGHLIGHTS of AMA's testimony included:

Section 125, to include the disabled.

The adoption of Section 125 . . . could change the direction of medicare from a program for older persons to one aimed at various

select categories. . . . We believe Title 19 should be utilized for that purpose.
We urge the committee to reject this provision.

Section 127, including podiatry.

While recognizing the usefulness of podiatry services, we are impelled to note that if the amendment is adopted, the podiatrist could assume responsibility for the care of some of the more difficult problems in medicine. We believe this to be unsound.

Section 130, creation of Part C of Title 18.

This section would provide a new Part C to cover payment for hospital services rendered to hospital outpatients; and for diagnostic specialty services to both outpatients and inpatients of hospitals. The AMA opposes Part C in toto. . . .

Section 131, physician certification.

The AMA endorses Section 131 which would remove the requirement of a physician's certification for inpatient hospital care for each Medicare patient admitted to a general hospital. We urge the committee to consider this amendment favorably and remove an unnecessary impediment to the operation of Part A.
We further urge that the requirement for re-certification be similarly deleted, since this need should be satisfied as a result of the work of utilization review committees.
Until re-certification is deleted, we suggest that the first certification date be the 20th day of hospitalization, as permitted in the existing law.

Section 220, income maximum under Title 19.

The AMA supports the concept of limiting eligibility for Title 19 benefits to persons who genuinely need financial assistance in meeting their health care needs.

Section 226, free choice under Title 19.

Although free choice is guaranteed for Title 18 recipients, a similar privilege was not extended to Title 19 beneficiaries. We believe this was an oversight, and we heartily support this perfecting amendment to Title 19.

Additional amendments proposed by the AMA.

First, the AMA recommends that Title 18 be amended to permit payment of charges for professional services on the basis of a physician's itemized statement of charges rather than a receipted bill.
Second, we recommend that Title 18 be amended to remove the requirement for three days of hospitalization before qualifying for extended care benefits.
In addition, we offer a recommendation relating to psychiatric care under Title 18.

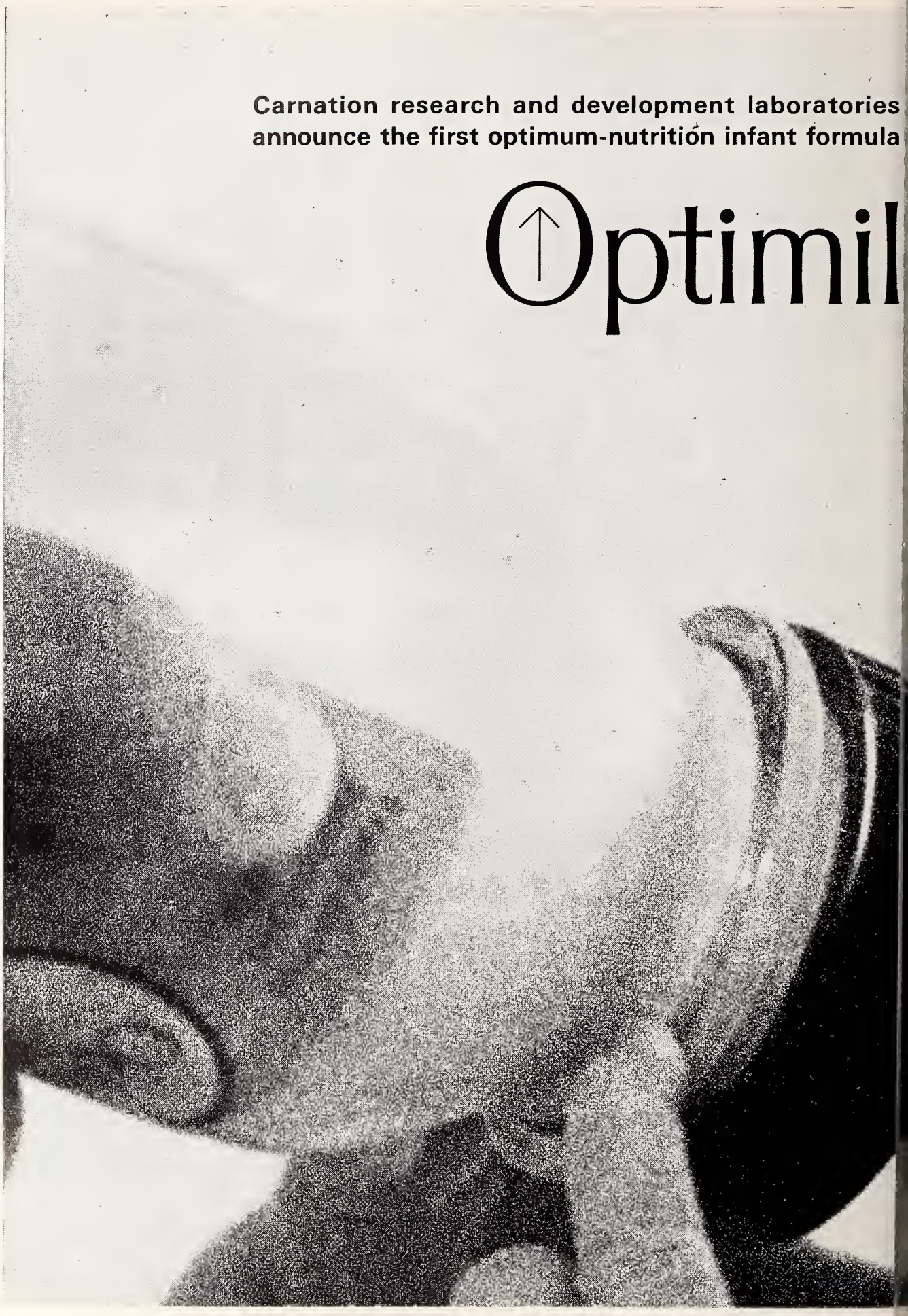
Regarding Title 19, we offer six amendments.
First, that the program permit payment to the patient for services rendered to him by a physician on the basis of the physician's itemized statement of charges.

Second, that the program clearly provide for the payment of physician fees on the basis of his usual and customary charges, using the same approach as that applied under Title 18.

Continued

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1. Carson, M., and Hart, L.: "New Perspectives on Nutritional Aspects of Modified Milk-Fat Formulas," Colloquim held under the auspices of The Pediatric Department, Western Reserve University School of Medicine at Cleveland, Ohio, Sept. 8, 1966. Data available on request.

2. Hepner, R.: ibid. 3. Nichols, M.: ibid. 4. McCann, M.L.; Teree, T., and Wallace, W.; ibid.

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Continued

Third, that Title 19 encourage the use of insurance carriers in the implementation of state programs.
Fourth, that in the implementation of Title 19 programs, there be no requirement for certification or re-certification.
Fifth, that Title 19 permit all state plans to vary the eligibility standards within a state to recognize the very real differences in the cost of living in a rural area, a small town, a city or a metropolitan area.
Our sixth recommendation relates to the fact that Title 19 benefits differ for mentally ill patients depending on whether they are above or below age 65. We believe there should be no distinction in the services available to mentally ill patients.

Physician coverage under Social Security.

We believe that physicians, having been brought under Social Security coverage, should be accorded the same privilege and opportunity for reaching a fully insured status as was accorded other professional groups when they were included in the program. Accordingly, we urge this committee to consider the adoption for physicians of an "alternative insured status" similar to that permitted by the amendments of 1954 and 1956 which brought into the program many new groups of people and professional self-employed persons, including lawyers. ◀

From *The Journal* 50 Years Ago



Much has been written about the suppression of unnecessary noises outside of hospitals, and in many cities the police departments have established what are known as "zones of silence" in the vicinity of hospitals. In these "zones of silence" it is a punishable offense for street cars to ring their gongs loudly, automobiles to run with exhausts open or with clanging of horns or Klaxons, and even the huckster is forbidden to call out his wares. Even the barking dog and the fellow who runs his lawnmower at five o'clock in the morning, if within these silence zones, are objects of punishment.

This is all very well and quite in keeping with common sense, but a good deal may be said about the suppression of unnecessary noises within the hospital itself. How often do we hear hospital patients say that they are dreadfully annoyed by slamming doors, creaking elevators, loud call-bells, giggling nurses, and the inevitable phonograph found in most hospitals! Then there are some visitors who, with total disregard for all of the proprieties of a hospital and the comfort of patients, persist in loud talking and laughing in the halls and corridors and in the rooms of convalescents. Even some doctors are known to use little judgment in making unnecessary noise when visiting patients in the hospital, and they set a bad example to nurses and others when they fail to move about quietly and modulate the voice when speaking.—Editorial, *JISMA*, May, 1917.

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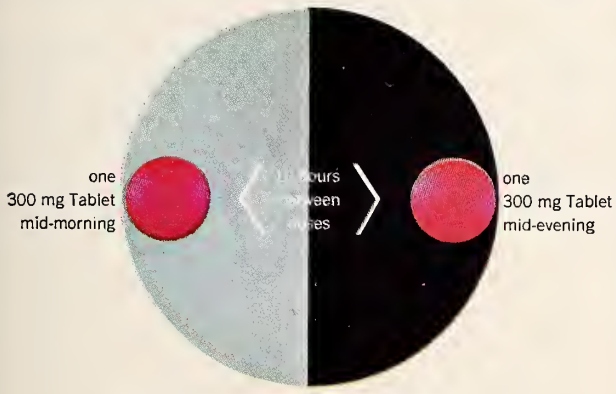


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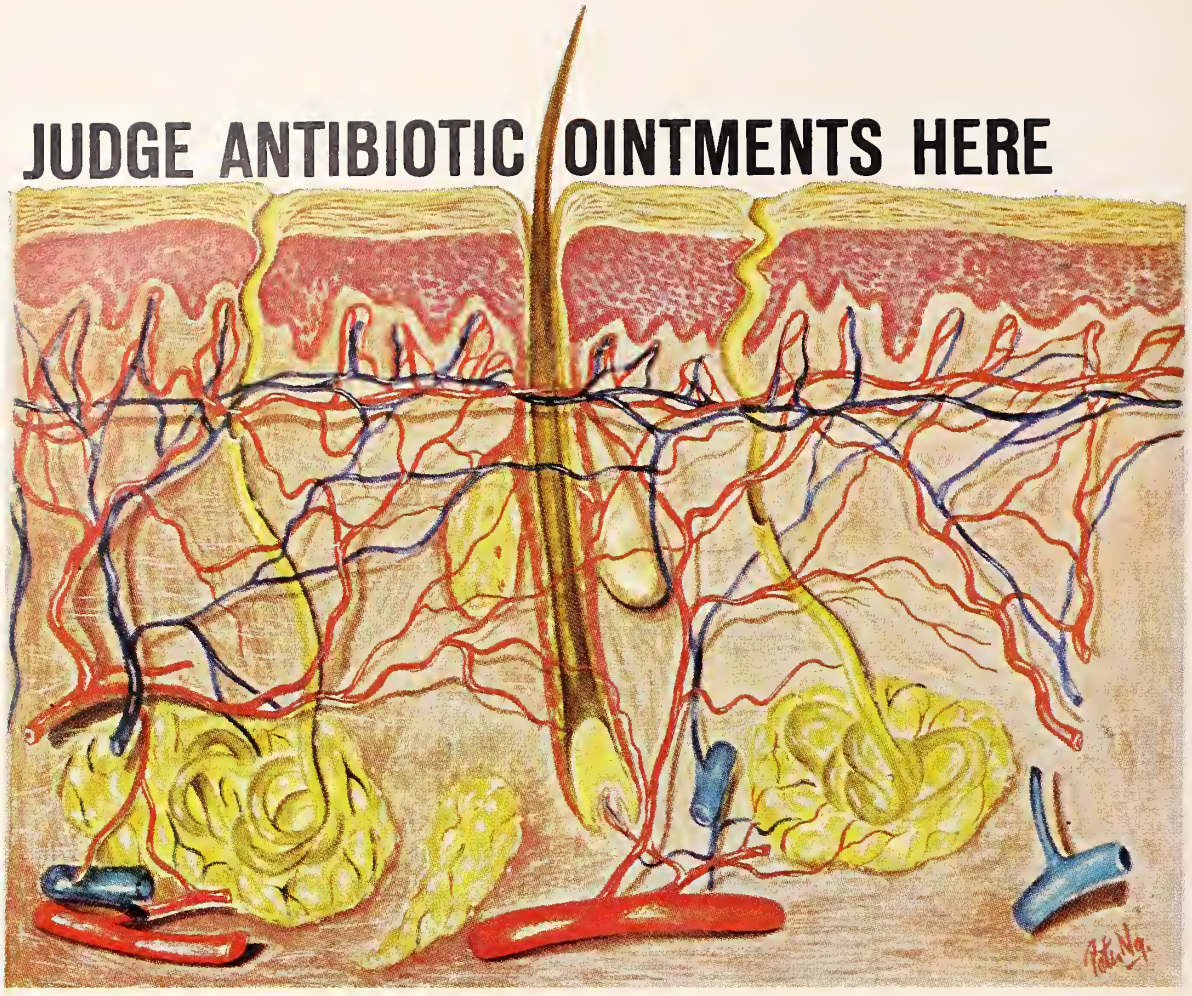
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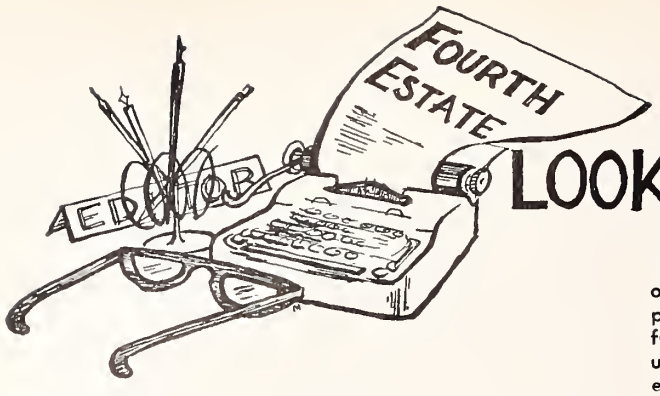
House of Delegates opening session

2:00 p.m., Monday, October 9, 1967

	Single	Double and Twins	Suites
Antlers Hotel 750 N. Meridian	6.50 - 10.00	11.00 - 13.00	
Claypool Hotel 14 N. Illinois	8.50 - 12.00	14.00 - 18.00	35.00 - 50.00
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Marott Hotel 2625 N. Meridian	9.00 - 15.00	13.00 - 18.00	30.00 - 50.00
Stouffer Inn 2820 N. Meridian	12.00 - 20.00	16.00 - 26.00	26.00 - 40.00
Holiday Inn 500 W. Washington	11.00 - 12.00	15.00 - 16.00	20.00, 25.00
Holiday Inn 1920 N. Meridian	11.00	12.00	20.00
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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentotion of opinions which appear on the editoriol poges of the public press, and which ore of interest to the medicol profession. Its function is to review comments which moy be fovoroble or unfavorable to medicine. Members ore invited to submit editorial clippings for this column.

Confidence in "Blue Ribbon" Fairness

It seemed quite a "tour de force" when someone (not one of us) ran in *The Record* a sizeable ad saying, "South Bend needs a medical center, write your Congressman." Since the location of a medical center, for the training of medics is in the hands of the legislature we should think it an imposition to clutter up a Congressman's desk with letters about the matter unless one is of the opinion that the federal government has its fingers in so many public pies that it would naturally have it in this one too and that a Congressman being on the important educational committee would have a say-so either directly or indirectly.

Indeed Uncle Sam will provide a large part of the funds for the establishment of a second medical school wherever the "Blue Ribbon Commission" establishes it in Indiana, taking it for granted it passes all the requirements of being a constitutional law. But here again Uncle Sam says he won't interfere with any state's prerogative in educational matters.

Whether South Bend needs the medical center or not, the question to decide is where does the public of Indiana need it most and in our firm opinion the answer is that SOUTH BEND IS THE LOGICAL SITE OF THE SECOND MEDICAL SCHOOL IN INDIANA from about every point of view. Hence we are not afraid of an unbiased selection.—*The South Bend Record*, March 10, 1967.

Medical Cost Rise

Numerous factors contribute to the continual, sharp rise in medical costs reported by the Department of Health, Education and Welfare. Most of these factors will continue to be felt, but the pace of increase might be slowed down.

That pace quickened alarmingly last year. Hospital charges jumped by 16.8%, the largest rise in 18 years. Doctors' fees took the biggest jump since 1927—a walloping 7.8 increase over the nation.

Though the HEW report minimizes the impact of Medicare, the start of that health program for the aged in mid-1966 undoubtedly played some part in the medical cost rise. Other factors appear to be more significant.

The causes of the rising cost of hospitalization have been operative for some years. Wages of hospital employees have gone up, but without a commensurate rise in productivity. As standards of care rise, more expensive facilities and equipment are required. The prices of everything hospitals use are higher.

The rise in doctors' fees is harder to account for, but some reasons can be discerned. One root cause, it seems, is a variant of the old law of supply and demand: the increase in the number of physicians has not matched the population rise, and at the same time people are seeing their doctors more often. Doctors, too, have to pay their aides higher wages, and their other costs are going up.

Improvement in the organization of medical services, in which HEW is taking the lead, offers promise of retarding the increase in hospital costs. More group practice, and above all, a boost in the number of doctors being trained, might put a damper on fee increases. There are other possibilities. All must be considered, and used if they prove feasible, if the medical cost rise is not to get out of hand.—*Terre Haute Tribune*, March 8, 1967.

Medical School

We would have hoped for the establishment of a medical school this side of Evansville. It took little imagination to visualize great relief for Mt. Vernon's medical doctor shortage in such a plan.

Yet, at no time did we seriously feel that the legislature could ethically overthrow the findings of the study committee which had recommended the Muncie location.

What we do see happening may be the abandonment of the idea of a second medical school, with subsequent strengthening of the present school.

And, perhaps this is the best course of all!

Dr. Glenn W. Irwin, Jr., Dean of the school, avers that the present school now needs 200 more qualified instructors.

The educator asserts that more than half of the I.U. School of Medicine graduates presently leave Indiana. He says that internships in the state are few, but many of them are left unfilled.

The per capita population of doctors in Indiana is below the national

average, yet there are only eight states in the USA which turn out more physicians than does Indiana, according to Doctor Irwin.

The shortage of doctors is made worse in Indiana because of the difficulty of obtaining a practicing physician's license. This is because of antiquated existing statutes passed when incoming doctors were considered a threat to the practice of those already in the state. Some statute relief has been effected, but residenceships are not yet good enough to attract out-of-state doctors.

It occurs to us that the first objective of the state should be a determination of why Indiana is less attractive to its medical school graduates than the states to which they go to set up practice. Until this is done, there can be no knowledgeable plan of action for gaining more physicians for Indiana.—*Mt. Vernon Democrat*, March 13, 1967.

Branigin's Vetoes Destructive

It was almost as if Gov. Roger D. Branigin thought he had been elected to be the legislature as WELL as the governor.

By the time Mr. Branigin had finished wielding his pen, more like a sword than a writing instrument, his vetoes last week had cut down a significant portion of the 1967 General Assembly's hard gained new legislation.

Down went the plan for a "blue ribbon" committee to pick the site for a second Indiana medical school.

That will delay for two MORE years any hope of such an institution, which northern Indiana in particular needs so urgently. The legislature itself had put up one roadblock by failing to agree on a particular site.

Down went two other measures urgently needed by northern Indiana: The $3 million increase in the industrial development fund and the $750,000 to provide matching grants to regional committees for tourism promotion.

Altogether Branigin vetoed 35 bills, including among others the legislators' salary hike, excise tax to replace the property tax on autos, the Medicaid measure designed to bring all medical aid programs into one, and the measure legalizing abortion in some cases. This veto may have been a wise one because the legalized abortion bill was fraught with moral questions which offended many citizens of our state.

His reason for the vetoes in many cases—including the medical school committee—was that such projects would cost too much.

But in a number of instances that is just being penny wise and pound foolish.

It is no "savings" to postpone indefinitely the second medical school. For our own northern Indiana, which faces dynamic population and economic growth, that can be VERY costly in terms of dollars by denying needed facilities. The same is true of legislation for tourist promotion and to expand industrial development.

In cases wherein he thought the legislature had gone too far (example, with the legislators' pay hike) the governor should have given the assembly ample warning of his disapproval.

That would at least have given the lawmakers the opportunity of trimming their bills accordingly, to an acceptable basis.

One trouble was glaringly apparent:

A deplorable lack of communication between the legislators and the governor.

The governor failed to assert a positive leadership while the assembly met.

By the time he got in motion, it seemed he was leading Indiana backward.

The governor's unpredictable action may well have made a martyr out of the 95th General Assembly.—*The Elkhart Truth*, March 13, 1967. ◄

*Ethical Responsibilities in Prescribing Drugs and Devices**

It is unethical for a physician to be influenced in the prescribing of drugs or devices by his direct or indirect financial interest in a pharmaceutical firm or other supplier. It is immaterial whether the firm manufactures or repackages the products involved.

It is unethical for a physician to own stock or have a direct or indirect financial interest in a firm that uses its relationship with physician-stockholders as a means of inducing or influencing them to prescribe the firm's products. Practicing physicians should divest themselves of any financial interest in firms that use this form of sales promotion. Reputable firms rely upon quality and efficacy to sell their products under competitive circumstances, and not upon appeal to physicians with financial involvements which might influence them in their prescribing.

Prescribing for patients involves more than the designation of drugs or devices which are most likely to prove efficacious in the treatment of a patient.The physician has an ethical responsibility to assure that high quality products will be dispensed to his patient. Obviously, the benefits of the physician's skill are diminished if the patient receives drugs or devices of inferior quality.

Inasmuch as the physician should also be mindful of the cost to his patients of drugs or devices he prescribes, he may properly discuss with patients both quality and cost.

* Adopted by the Judicial Council, American Medical Association, March 12, 1967.


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The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 60 — May 1967 — Number 5

Dr. John S. Bobbs of Indiana

The First Cholecystotomist

ROBERT S. SPARKMAN, M.D.
Dallas, Texas

IT is characteristic of men, of states, and of nations that they seek priority for heroic accomplishments, whether it be for climbing the highest mountain, orbiting the earth, splitting the atom, discovering a new island, planet, plant or animal, breaking the four-minute barrier in the mile run or performing the first operation of a particular kind.

The fact that an American, Ephraim McDowell of Danville, Kentucky, was the world's first ovariotomist has been widely acclaimed and is well known to most physicians in this country. It is not so generally appreciated, however, that the first abdominal operation involving the gallbladder was also performed by an American. A century ago, on June 15, 1867, Dr. John S. Bobbs of Indianapolis opened a greatly distended gallbladder, removed many stones and a quantity of clear liquid and then closed the gallbladder and abdomen. His patient survived and lived 46 additional years.

Neither Dr. Bobbs nor his early biographers appreciated the unique significance of this procedure. Moreover, other pioneers in the field of biliary surgery were unaware of Bobbs' published report or of his priority in this field, and gave credit instead to J. Marion Sims, whose single operation upon the gallbladder was performed 11 years later. More than 30 years elapsed before Bobbs was widely acknowledged as the world's first cholecystotomist.

The Early Years

John Stough Bobbs, son of Elizabeth and Conrad Bobbs, was born in Green Village, Franklin County,* Pennsylvania, on December 28, 1809. This was the natal year of Lincoln and Holmes in America, and of Gladstone, Tennyson and Darwin in England. The birth of Bobbs occurred 15 days after Ephraim McDowell first examined Jane Todd Crawford, and just three days after she submitted to the first ovariotomy.

Bobbs received his early education in the village schools of the Pennsylvania Dutch country where he was born. At the age of 18 he went on foot and without means to Harrisburg, Pennsylvania. In some way he attracted the attention of Dr. Martin Luther, a prominent physician of Harrisburg. For three years he read medicine as a private student with Dr. Luther; he also took one course of formal lectures during this time. There is nothing to tell us how he supported himself during these years. He then went to Middletown, Pennsylvania, where he remained in practice for four years.

In 1835, at the age of 26, for reasons unknown, he moved to Indianapolis and entered practice there. He practiced general medicine, but showed an early interest in surgery as a specialty. Before the year ended, however, he returned to Pennsylvania and enrolled in the Jefferson Medical College in Philadelphia. After a year or less, he returned to spend the remainder of his life in Indianapolis.

Civic Leader

In 1848 he participated in the formation of the Indianapolis Medical Society and became its first secretary. This was the forerunner of the Marion County Medical Society. During the following year, Bobbs and this group were instrumental in bringing about the organization of the Indiana State Medical Society.

In 1849 the Indiana Central Medical School was established in Indianapolis by Asbury College (later DePauw University). Bobbs was appointed dean of the medical school and also served at times as professor of anatomy and surgery. The medical

* Some Bobbs references have placed Green Village in Cumberland County. However, Franklin County, in which Green Village is located, was formed in 1784 from a part of Cumberland County.

school closed its doors in 1852, three years after its inception. By this time, however, Bobbs' reputation as a surgeon seems to have been well established, and it is apparent that the remainder of his professional career was devoted largely to this specialty.

In 1856 he ran for the office of state senator from Marion County and was elected for a four-year term. He was seated in 1857, and was active in the sessions of 1857 and 1859. All of his biographers agree that he had no liking for politics, but that he ran for office because of a feeling of civic obligation and responsibility. In 1840 or 1845 he had married Catherine Cameron of Pennsylvania, sister of Simon Cameron, a United States senator who later played an important role in Lincoln's cabinet. These family influences may have had something to do with Bobbs' venture into politics.

During these years Bobbs helped to establish the Indiana Hospital for the Insane and to plan and erect its original buildings. He also participated in the development and activities of schools for the blind and for the deaf.

War and Peace

When the Civil War began he was 52 years of age. He served for a time in a civilian capacity with General T. A. Morris in the first campaign of the Civil War, and was stationed at Laurel Hill, Virginia. During this engagement he is credited with an act of heroism wherein he stopped a panic among some young recruits. He is said to have been at one time the chief surgeon of General McClelland's troops in the South. He also acted as medical director for the district of Indiana and worked among the prisoners of war at Camp Morton in Indianapolis. However, these activities apparently were all performed in a civilian capacity and he was never actually on the Army roster.

The Civil War ended on April 9, 1865. Six days later Lincoln was dead of an assassin's bullet. Before the end of the year the 13th Amendment was ratified, abolishing slavery, and the Ku Klux Klan was organized in the South in an effort to uphold white supremacy. This was a time of rapid and profound social and economic change, the threshold of the Reconstruction Era.

During the following year, 1866, a Civil Rights Bill was passed by Congress over the veto of President Andrew Johnson. The Young Women's Christian Association and the American Society for Prevention of Cruelty to Animals were founded, and the Christian Science Church was organized by Mary Baker Eddy. An Atlantic cable to England was completed. Jesse James organized a band of outlaws in the West. Lt. Col. George Armstrong Custer of the U. S. Cavalry was sent to quell Indian uprisings under Sitting Bull and Crazy Horse.

By 1867, Indianapolis, a rapidly growing community, had attained a population of 45,000.* Dr. John S. Bobbs, 57 years of age, lived on a 20-acre farm touching the city limits of Indianapolis on the east. What is there about the year 1867 that is worth remembering? Nebraska was admitted as the 37th state; Midway Island was formally occupied in the name of the United States; Alaska was purchased from Russia for two cents an acre. In England, Joseph Lister published his first reports on the antiseptic method in surgery. The first Horatio Alger books for boys were published, and *Harper's Bazar*** was founded as a woman's weekly magazine. The Benevolent and Protective Order of the Elks was organized for actors and literary men. Baseball was the national sport and a Brooklyn pitcher named Cummings invented the curve ball. A yellow fever epidemic raged in Texas and Louisiana, with the loss of 5,000 lives in Galveston and New Orleans alone. The first practical typewriter was invented; the first stock tickers were installed; the windmill was patented. The Reconstruction Act was passed by Congress over the veto of President Johnson. An old religious verse, "We're Marching to Zion," was put to music and found its way into the hymn books. Johann Strauss composed his most famous waltz, the Blue Danube, which was first performed publicly in Vienna on February 13, 1867.

The Time and Place

On June 15, Dr. John S. Bobbs performed an abdominal operation which attracted neither national nor local attention. Four days later the Emperor Maximilian was executed in Mexico. Sixteen days later Canada was elevated to the status of a dominion. During the week beginning June 15 and ending June 21, the *Indianapolis Daily Journal* and the *Indianapolis Daily Herald* contained no mention of Bobbs' operation. The important news of the week concerned the Emperor Maximilian, the Surratt trial which followed the Lincoln assassination and the alarming fact that the national debt now exceeded 171 million dollars. The cost of bacon was 12 cents a pound. The advertisements of Dr. William Thomson guaranteed a radical and permanent cure from social diseases which, if untreated, could lead to such annoyances as "sounds like the rustling of leaves in the head or fits of insanity." A Dr. Swank proclaimed the cure of thousands of cases of cancer without resorting to drugs or instruments.

Bobbs' operation upon the gallbladder was performed two years and two months after the termination of the Civil War. It is likely that this was the first major medical contribution of the postwar era in America. His patient, "E. W.," was 30 years of age.* For four years she had been aware of a gradually enlarging mass

* 1860 census: 18,611; 1870 census: 48,244.

** Later changed from *Harper's Bazar* to *Harper's Bazaar*.

* In Bobbs' report, the age of the patient is given as 30 years. According to the dates on her tombstone, her age was actually 31.

in her right abdomen which finally became so large and so tender that she was disabled from walking and could no longer follow her occupation of running a sewing machine.

Various physicians whom she had consulted had told her that she had an ovarian tumor. Bobbs, however, stated that he could demonstrate no connection with the uterus or its appendages. Although admitting that the true character of the mass was indefinite, he did think it unlikely that it was ovarian in origin. Being uncertain, therefore, as to what the outcome of an operation might be, he was unwilling to recommend abdominal exploration. "She, however, so persisted in the request that I should undertake its removal, that I finally consented to make the attempt, and on the 15th of June, 1867, assisted by Drs. Newcomer, Todd, Comingore, Mears, Moore, Avery and a medical student* proceeded to do so."

The operation was performed on the third floor of Kiefer and Vinton's wholesale drugstore located at 26 South Meridian Street in downtown Indianapolis (Figure 1). Bobbs' office was a short distance away, at 15 East Washington Street.**



FIGURE 1

VIEW of Meridian Street looking south from Pearl Street. Kiefer and Vinton's Wholesale Drug Company, located at 26 South Meridian, is the first building on the right. The first cholecystotomy was performed on the third floor of this building. (Photo courtesy of John C. Rugenstein, Indianapolis.)

The Operation

Chloroform anesthesia was administered. The incision which Bobbs employed initially was that which he would have utilized for ovariotomy, that is, from umbilicus to pubis. The omentum was adherent to the wall of the abdomen and it was necessary to tear through it in order to reach the tumor. At this point Bobbs continues his story as follows: "Enlarging the opening through the omentum the tumor was plainly visible, but the orifice would not admit of its exit. The wound through the abdominal walls was carried an inch above the umbilicus on the right side, over the prominent part of the enlargement, which was made to pass through it. This was found to be oval in form, about five inches in length, and two inches in diameter at its widest part, tense, and evidently contained a pelucid [sic] fluid. No pedicle could be made out, and the sack showing its contents to be transparent, its lower margin was cut through, when a perfectly limpid fluid escaped, propelling, with considerable force, several solid bodies about the size of ordinary rifle bullets.

"Introducing the finger other solid bodies were felt, but not in the main sack. A number were hooked out with the finger, and varied in size from that of a mustard seed to that of a bullet. One of the latter size could be distinctly felt, but no communication between the space containing this and the main sack could be found, and it was not removed, being situated at the extreme end of the finger. The sack had the appearance externally of an hydatid, its walls were of the thickness of ordinary cuticle, smooth in its inner aspect, and were whitish and semi-pellucid. Pulling it downward, after being evacuated, brought into plain view the right lobe of the liver, to the lower surface of which it was attached by a broad linear base like the gall bladder. The finger introduced into the sack detected what seemed to be smaller sacculi, opening into the main one.

"It had the appearance of an enlarged gall bladder, or an appendage to this, although its size, the clear serous character of its contents, and the thickness and semi-transparency of its walls, might justify some degree of doubt upon this subject. From its form, attachments, and solid accretions, one of which could be so distinctly felt in a diverticulum, but which I did not succeed in removing, seemed to mark its identity with the gall bladder, and deterred me from the excision [sic] of the sack, as I should otherwise have done. I therefore put a stitch in the cut lips of its

* The medical student was John Cameron, nephew of Dr. Bobbs' wife. John J. Cameron (1840-1924) is one of five persons buried on the Bobbs funeral lot. According to a later account by the patient, a Dr. D. H. Oliver was also present.

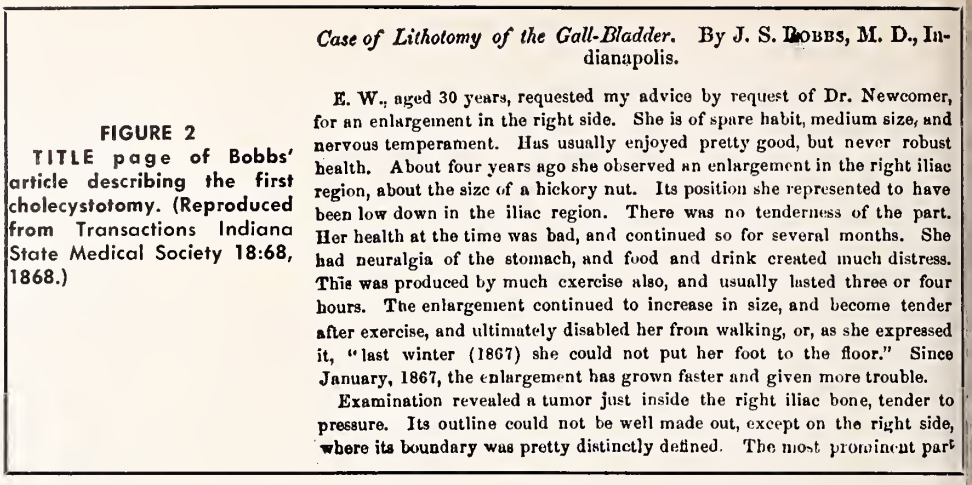
** Bobbs' office was on the site now occupied by the State Life Insurance Building.

walls and cut the ends closely.

"This step was suggested by the apprehension that if any portion of its solid contents should have been overlooked, their escape into the cavity of the abdomen would be prevented, and the belief that the sack, in the event of its refilling with fluid, would become adherent to the walls of the abdomen, and be within the reach of a trochar, and make it practicable to obliterate it by injection, if it became necessary. . . . The wound was closed by sutures and adhesive plaster, no vessel requiring to be ligated."[2]

The Recovery

Mary Wiggins' recovery was relatively uncomplicated, although she required frequent catheterization. An English woman was engaged to remain with her throughout her convalescence. On the first day after operation, "as she complained of her bed, another was placed along side of it, upon which she was removed." On the second day, this notation: "Urine drawn off, although she desires to rise and pass it." On the sixth day, "A healthy discharge is issuing from one point in the wound", and on the seventh day: "Some thick pus issued from one point, at the junction of the lower with the middle third of the wound. Abdomen less full and much less tender. Feels much better, and complains of nothing but urinary trouble. Allowed her clothing to be changed, which she has begged permission to do for several days." He then adds "From this period her recovery was progressive, and requires no special remark. In about two weeks she was permitted to sit up, and in three weeks to move about her room, and in four to ride out."[2] He states finally that during an observation period of ten months following the operation, the patient experienced some intermittent fever and impaired digestion, but was able to return to her work. His report was published in May, 1868, almost one year after the operation (Figure 2). There is nothing in his narrative to indicate that he knew this operation had never been performed previously.



Case of Lithotomy of the Gall-Bladder. By J. S. Bobbs, M. D., Indianapolis.

E. W., aged 30 years, requested my advice by request of Dr. Newcomer, for an enlargement in the right side. She is of spare habit, medium size, and nervous temperament. Has usually enjoyed pretty good, but never robust health. About four years ago she observed an enlargement in the right iliac region, about the size of a hickory nut. Its position she represented to have been low down in the iliac region. There was no tenderness of the part. Her health at the time was bad, and continued so for several months. She had neuralgia of the stomach, and food and drink created much distress. This was produced by much exercise also, and usually lasted three or four hours. The enlargement continued to increase in size, and become tender after exercise, and ultimately disabled her from walking, or, as she expressed it, "last winter (1867) she could not put her foot to the floor." Since January, 1867, the enlargement has grown faster and given more trouble.

Examination revealed a tumor just inside the right iliac bone, tender to pressure. Its outline could not be well made out, except on the right side, where its boundary was pretty distinctly defined. The most prominent part

FIGURE 2
TITLE page of Bobbs' article describing the first cholecystotomy. (Reproduced from Transactions Indiana State Medical Society 18:68, 1868.)

Bobbs was not in good health at the time when he performed the first cholecystotomy. According to the patient, he was suffering from some affliction impairing his breathing and often had to recline on a couch for some time after climbing to the third floor to visit her. Nevertheless it is evident that he was at the pinnacle of his capacity and influence. In the three years of life which remained to him, he continued to assume new responsibilities of increasing magnitude.

He served as 19th president of the Indiana State Medical Society for the year 1868. In his inaugural address delivered at Indianapolis on the evening of May 19, 1868, he urged that a medical school be established in the state of Indiana and that a medical journal be published. He had submitted to this same meeting a manuscript entitled "Case of Lithotomy of the Gall-Bladder." On the morning of May 20, at the request of the convention, he read his paper to the members. Both his presidential address[3] and his case report[2] were published in Volume 18 of the *Transactions of the Indiana State Medical Society* for the year 1868. It is certain that these transactions were not widely read in this country, and there is some evidence to suggest that their principal, if not their sole, distribution was to members of the society. As a consequence, few people outside the state of Indiana were aware that such an operation had been performed.

During the following year, 1869, he began to witness the fulfillment of the recommendation which he had made in his presidential address of the former year. Under the impetus of the Indianapolis Academy of Medicine, the Indiana Medical College was organized and construction of a school building was begun at the northwest corner of Court and Delaware Streets.[16*] Bobbs was appointed president of the faculty (a position comparable to that of dean) and professor of principles of surgery. The opening session of the new college was held in the Senate Chamber of the State House on the evening of November 1, 1869, and the inaugural address was delivered by Dr. Bobbs.[4**] Classes were held in the Senate Chamber until December 26, when the new building was ready for occupancy. At the request of the class of the Indiana Medical College, the inaugural address of Dr. Bobbs was printed privately. This was his

* The original building is still standing. It is now known as the DelCourt Building. The first floor houses the AAA Grocery and Lena's Lounge. There is an art gallery on the second floor, while the upper floors are apparently vacant.

** Although the talk was delivered on November 1, 1869, the published address is dated January 15, 1870. This is the date of a letter from a committee of the class requesting a copy of the address, and is also the date of a reply from Dr. Bobbs in which he complies with the request. Both letters are reproduced in the flyleaf of the publication.

third and last publication. All the published works of John S. Bobbs appeared within the last two years of his life.

Last Years and Aftermath

On Saturday, April 23, 1870, after a trip of about 30 miles to and from Plainfield to see a patient, Bobbs developed an acute respiratory infection. He died eight days later, on Sunday, May 1, 1870. He is said to have retained full possession of his faculties almost to the end, and was able to anticipate his death and to dictate a will during his terminal illness. Among his colleagues it was felt that his death was the worst possible blow which could have befallen the new medical college. Obituaries in the local newspapers were lengthy and laudatory, but failed entirely to mention his operation upon the gallbladder. Within the next year memorial tributes were written for the Indiana Medical Society and *Indiana Journal of Medicine* by two of his most devoted and admiring colleagues. One of them had been present at the cholecystotomy.[13] The other had been associated with him in practice for many years.[19] Neither of them mentioned his operation upon the gallbladder. Clearly his contemporaries were totally unaware of the significance and magnitude of this contribution. Nevertheless, they regarded him as a surgeon of distinction, a civic leader, an educator and a colleague whose influence in the community would be irreplaceable.[9]

Some of the desires and ambitions of Dr. Bobbs were evident in the provisions of his will. He left $5,000.00 for the development of a free medical library under the direction of the Indianapolis Library. To this he added his own personal library. An additional $2,000.00 was allocated for the establishment of a city free dispensary. As the Bobbs Free Dispensary, this later became a part of the General Hospital under the direction of the Indiana University School of Medicine.

Recognition of Bobbs' principal contribution was destined to be slow in coming. Eleven years elapsed before anyone else undertook to operate upon the gallbladder. Then, in 1878, within a period of less than seven months, three men each performed a single gallbladder operation. On April 18, 1878, J. Marion Sims[18] operated upon an American woman in Paris. She had been jaundiced for several months and had developed a large mass in the right hypochondrium. At operation Sims opened the distended gallbladder, removed some 60 stones, and sewed the open gallbladder into the wound. The patient developed hemorrhages from multiple sources and died eight days later. It is clear that Sims was unaware of Bobbs' procedure. He remarked "I believe that this operation is unique. . . . As this is a new operation, we must find a name for it."[19] He then proposed that it be called "cholecystotomy." We now utilize the term "cholecystostomy" for such a procedure, but for several years after Sims' suggestion, any drainage procedure upon the gallbladder was referred to as a cholecystotomy.

On June 18, 1878, just two months after Sims' operation, Theodor Kocher[12] of Switzerland performed a successful two-stage cholecystostomy for empyema of the gallbladder upon a woman 30 years of age. He did not mention Bobbs' report. The third gallbladder operation in that year was done by W. W. Keen[10] of Philadelphia on November 4, 1878. His patient, a woman 60 years of age, had been deeply jaundiced for several months and had developed a large abdominal mass. Cholecystostomy was performed, but the patient died 36 hours after operation. As in the case described by Sims, there was bleeding from the wound and from the gastrointestinal tract, and death was apparently the result of a prothrombin deficit. Keen commented that "so far as I know this is only the second case in which cholecystotomy has been done. The first will be found in *The British Medical Journal* for June 8, 1878, p. 811" (Sims' case report).

It remained for Lawson Tait[21] of Birmingham, England, to popularize the operation of cholecystostomy. Of the first 27 documented surgical procedures upon the gallbladder, 14 were reported by Tait. His first gallbladder operation was performed on August 23, 1879, and was reported in November of the same year. An adult female was subjected to operation because of a large abdominal mass, which proved to be a hydropic gallbladder. Two large stones were removed and the opened gallbladder was sutured into the wound. The fact that Tait also was ignorant of the contribution of Bobbs is evident from the statement in his report that "Dr. Marion Sims was the first to follow out the plan, but unsuccessfully, and the present case was the first successful one."

Eventual Recognition

In the same year, 1879, Bobbs finally received some recognition for his contribution. Kemper,[11] of Muncie appears to have been the first to call attention to Bobbs' operation and to its priority in surgical procedures upon the gallbladder. His article appeared in the *Transactions of the Indiana State Medical Society*, 12 years after Bobbs' operation. It contained a review of the development of biliary surgery up to that time. In his conclusion Kemper stated: "It is a pleasing duty to pay this small tribute to the memory of our departed fellow and brother. While several European and American surgeons are discussing the feasibility and priority of the operation of cholecystotomy, with as yet no complete results, but only the promise of success for the future, they are astonished to learn that the operation was successfully performed by a surgeon of Indiana, twelve years ago."

In his *Biography of Eminent American Physicians and Surgeons* published in 1894, R. F. Stone[20] of

Indianapolis stated that Bobbs was the first to perform cholecystotomy. As late as 1899, however, during a meeting of the American Association of Obstetricians and Gynecologists in Indianapolis, Bobbs' priority in this operation was questioned. In rebuttal, the editor of *The Indiana Medical Journal*, A. W. Brayton,[5] reproduced Bobbs' original article of 1868, and added some comments of his own. Reproductions of Bobbs' original article were mailed to "every surgeon and laparotomist of note, both in the United States and Europe."

For more than 30 years the only articles which mentioned Bobbs' contribution to surgery of the gallbadder were those which were published in Indiana.* In 1899, Ransohoff[14] of nearby Cincinnati began an article as follows, "Cholecystotomy was first performed by Boggs [sic] in 1868. It was not made a formal operation until ten years later, by Marion Sims." In 1901 Martin B. Tinker,[22] then an assistant resident surgeon at the Johns Hopkins Hospital, published in *The Bulletin* of that institution an article entitled "The First Nephrectomy and the First Cholecystotomy, with a Sketch of the Lives of Doctors Erastus B. Wolcott and John S. Bobbs." Tinker remarked that "some will be inclined to criticize the claims to the honor of priority for the two men because the operations were undertaken without a knowledge of the conditions later found. But I would like to ask, what person who has seen many operations has not seen some of the best surgeons obliged to change their diagnosis after opening the abdomen? Because Columbus set out with a purpose quite different than the discovery of a new continent, because he died without appreciating the importance of his discovery, is he any the less the discoverer of America?" Throughout the twentieth century, Bobbs has generally been recognized as the first to perform an abdominal operation involving any surgical procedure upon the gallbladder.[6-8,15,17]

Indianapolis Revisited

The site where Bobbs performed his operation was then and still is in the center of downtown Indianapolis. The shop of Kiefer and Vinton, wholesale druggists, was located at 26 South Meridian Street, on the southwest corner of the intersection of Meridian and Pearl Streets. The operation was performed on the top floor of this three-story building in "a bare barn-like room made to serve the purpose of an improvised hospital." It is of incidental interest that nine years later, on May 10, 1876, Eli Lilly opened his first shop a few steps away, at 15 West Pearl Street. In 1891 the Kiefer and Vinton building and the building in which the Lilly Company was located were demolished to make way for the construction of the Commercial Club Building, a structure of eight stories. The Commercial Club was the forerunner of the Indianapolis Chamber of Commerce, and Eli Lilly was its first president.

In December, 1891, during the construction of this building, a copper box was sealed in the cornerstone. Thirty-seven years later, in 1928, this building was razed to permit construction of the present structure, an eleven-story annex to a large department store, L. S. Ayres and Company. During demolition the copper box was recovered from the cornerstone. Its contents were revealed at a special dinner attended by members of the Chamber of Commerce, officials of the Ayres' store and other dignitaries. It contained coins of the year 1891, copies of five newspapers then published daily in Indianapolis, and many items of local historical and civic interest. There was no mention, however, of the fact that this building had been erected upon the site of the world's first gallbladder operation.

Ayres' main store occupies the area from Washington Street to Pearl Street, with its side extending along Meridian Street. The Ayres' annex which occupies the site of the old Kiefer and Vinton store is just across Pearl Street, and is connected to the main building in its upper floors. Pearl Street is now little more than a narrow tunnel running between these two structures. As one enters this shadowy tunnel, on his left he comes upon a modest bronze plaque fixed to the wall of the Ayres annex (Figure 3). It reads as follows: HERE IN 1867 DR. JOHN STOUGH BOBBS PERFORMED THE FIRST SUCCESSFUL REMOVAL OF GALL STONES IN MAN. This

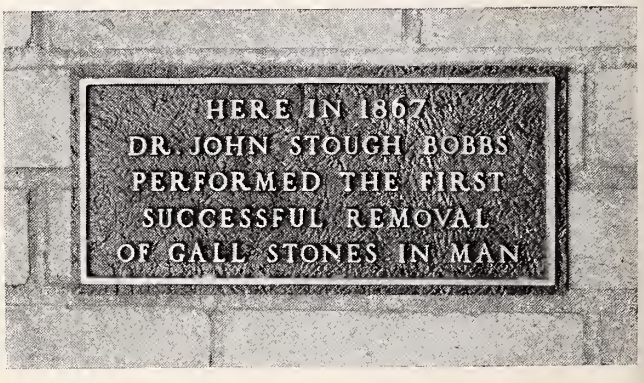


FIGURE 3
A bronze plaque on the Pearl Street wall of the L. S. Ayres Department Store annex commemorates the site of the first cholecystotomy. (Bass Photo Co., Indianapolis.)

* Since the completion of this manuscript, two earlier references to Bobbs' operation have been found, one from Philadelphia in 1884 and one from New York in 1892. Each author credits Bobbs with priority in the operation of cholecystotomy. References are as follows: Musser, J. H., Keen, W. W.: Cholecystotomy; with a Report of two New Cases, a Table of all the Hitherto reported Cases, and Remarks, *Am. J. Med. Sc.* 88:333, 1884. Dennis, F. S.: The Achievements of American Surgery, *Trans. N.Y. State Med. Assn.* 9:201, 1892.

plaque was donated by Mr. Julian Bobbs of Indianapolis in May, 1965.*

As one proceeds down this dark street, which truly is little more than an alley, some 50 paces further along he will see on his left a second bronze plaque, somewhat larger, with the following inscription: ON THIS SITE COLONEL ELI LILLY FOUNDED THE LILLY LABORATORIES IN 1876.

There is yet another memorial to Dr. Bobbs in Indianapolis. In 1916 a large bronze tablet with a three-quarter figure of Dr. Bobbs in bas-relief was presented by members of the faculty of the Indiana Medical College to the Indianapolis Public Library (Figure 4).** This bronze was the work of the noted sculptor, Gutzon Borglum, who executed the monumental works at Stone Mountain and at Mount Rushmore. The plaque is now mounted on the south wall of the Arts Division of the Indianapolis Public Library. (This was formerly the medical section of the library.)

In his published report, Bobbs designated his patient only as "E. W.", a seamstress from Indianapolis. In later publications she was identified as Miss Mary E. Wiggins. At some time subsequent to the operation, she married Ziba Burnsworth, and went to live in McCordsville, some 15 miles northeast of Indianapolis on State Road 67. In June, 1905, through the efforts of Dr. W. N. Wishard acting on behalf of the Medical College of Indiana, Mrs. Burnsworth was taken as a guest to Portland, Oregon, where she was exhibited to physicians attending the meeting of the American Medical Association.[1] Her case history was presented to the Section on Surgery and Anatomy by Drs. A. W. Brayton, W. N. Wishard, and L. H. Dunning, all of Indianapolis. Mrs. Burnsworth

* Dr. Bobbs had no children. Mr. Julian Bobbs is the grandson of John Antrim Bobbs, who was a nephew of Dr. John S. Bobbs.

** Dedicated October 11, 1917.

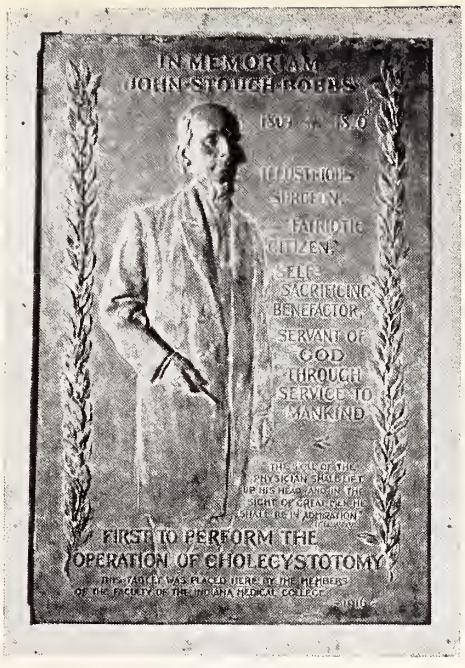


FIGURE 4
BRONZE bas-relief of Dr. John S. Bobbs in Indianapolis Public Library. (Bass Photo Co., Indianapolis.)

died on April 22, 1913, at the age of 77, having lived for almost 46 years following her one operation. During this time she had experienced only an occasional episode of abdominal discomfort, which she attributed to the stone which had been left in her gallbladder. All reference sources, including her obituaries and death certificate, state that she is buried at McCordsville. This, however, is incorrect. She is actually buried in Oaklandon, a community about three miles from McCordsville on the road to Indianapolis.

Bobbs is buried on a wooded hilltop in the beautiful Crown Hill Cemetery in Indianapolis (Figure 5). His grave is surmounted by a tall shaft of red granite which proclaims only that here lies "John S. Bobbs M.D.— Late President of the Indiana Medical College." Nowhere on the stone is there any mention of his historic operation. The view from the grave site is serene and majestic. The graves of Benjamin Harrison, James Whitcomb Riley and Booth Tarkington are nearby.

And now, in 1967, a century after the first cholecystotomy, it is appropriate that the operation performed by Bobbs be acknowledged again as one of the notable landmarks in the history of surgery in the United States and in the world. One can scarcely improve upon the concluding remarks of Kemper in his article published in 1879: "And so, when the operation of cholecystotomy shall have been placed on a firm and scientific basis, and recognized and acknowledged by our profession — as it assuredly will — and its literature fully considered, the lustre of no name on its role [sic] shall exceed that of Dr. Bobbs."

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FIGURE 5
GRAVE of Dr. John S. Bobbs, Section 7, Lot 53, Crown Hill Cemetery, Indianapolis. (Bass Photo Co., Indianapolis.)

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THE PRESIDENT'S HEALTH MESSAGE

To The Congress of The United States

HIGHLIGHTS

"I have directed the Secretary of Health, Education and Welfare to establish a National Center for Health Services Research and Development."

"I am directing Secretary John Gardner to convene at the Department of Health, Education and Welfare a National Conference on Medical Costs."

"I am appointing a National Advisory Commission on Health Facilities to study our needs for the total system of health facilities—hospitals, extended care facilities, nursing homes, long-term care institutions, and clinics. In addition to considering the future of the Hill-Burton Program, the commission will make recommendations for financing the construction and modernization of health facilities."

"I am seeking funds to establish an International Center for Advanced Study in the Health Sciences and to provide scholarships and fellowships in the Center."

"I am directing the Secretary of the Department of Health, Education and Welfare to appoint immediately a lung cancer task force, to supplement the continuing work of existing task forces on leukemia, cancer chemotherapy, uterine cancer, solid tumor and breast cancer."—Reprinted from *The Bulletin of the Association of American Colleges*, Vol. 11, No. 3, March 3, 1967.

Mary Wiggins Burnsworth of Indiana

The First Person to Undergo Operation upon the Gallbladder

ROBERT S. SPARKMAN, M.D.
Dallas, Texas

"To be courageous . . . requires no exceptional qualifications, no magic formula, no special combination of time, place and circumstance. It is an opportunity that sooner or later is presented to all of us."—John F. Kennedy—*Profiles in Courage.*

IN the beginning of our nation, the search for freedom and opportunity and the lure of new frontiers brought to this country a band of settlers notable for their determination, their self-reliance and their courage. The men came first, and the women soon followed. Of all their heroic qualities, perhaps the most notable was courage. This essential quality has helped this country to achieve its place in history.

Until the twentieth century, the woman who submitted to an abdominal operation accepted a greater risk than the astronaut who is shot into orbit today. Moreover, a special sort of courage was required by that select group of women who underwent surgical procedures which had never been performed before. They were medical pioneers, co-partners with their surgeons in the exploration and conquest of a frontier as formidable as outer space. Our nation has had its share of them, and they have helped to elevate American surgery to a level of distinction never known before. Regrettably, however, we have not always accorded them the recognition and the honor to which they are justly entitled.

Our Pioneer Women

In 1809 Jane Todd Crawford, grievously ill and supporting her huge abdominal tumor on the horn of her saddle, journeyed 60 miles on horseback from Motley's Glen to Danville, Kentucky, to undergo the first ovariotomy. The doctor had examined her at her home. She had reached her own decision to undergo the operation he had offered as "an experiment" if she would come to Danville where he lived.

On Christmas Day, strapped to a kitchen table, she submitted to laparotomy without an anesthetic. The procedure lasted 25 minutes. Throughout this time she remained conscious and sustained herself by repeating the Psalms aloud and by singing hymns to Almighty God. Five days later her surgeon, Ephraim McDowell, found her making her own bed. In 25 days "she returned home as she came," on horseback over 60 miles of wilderness road. Within a year the Crawford family moved from Motley's Glen. Ultimately they settled in Indiana, where they spent the remainder of their lives. Jane Crawford died there in 1841 at the age of 77, having survived 31 years after her operation. Her death attracted no attention whatever, and for 71 years she lay forgotten in the cemetery of an Indiana village. In 1912, after a prolonged search, her grave was finally located in the Johnson Cemetery about four miles from the small rural community of Graysville in Sullivan County. If we had a Westminster Abbey in America, she should be buried there.

In the years between 1835 and 1839 a South Carolina slave girl named Anarcha endured 30 vaginal operations by J. Marion Sims before she was finally cured of her vesicovaginal fistula.[7] This series of operations started Sims on his way to fame. Anarcha, however, is forgotten, and doubtless lies in an unmarked grave. Anarcha's travail was suffered just a few years before the discovery of anesthesia. What fortitude and courage it must have required for her to submit endlessly to operations of this sort! She, like Jane Todd Crawford, is an authentic American heroine, a pioneer who made an enduring contribution to the nation and to medicine.

Mary Wiggins, the Heroine

This is the story of Mary Wiggins, the first person to undergo an operation upon the gallbladder. She was born on January 31, 1836. The place of her birth is unknown, and no information is available concerning any of her kin. The first known public records containing her name appeared in 1868. In that year Logan's *Indianapolis Directory*[11] listed Mary Wiggins, tailoress, who worked at White's Shop and lived at 237 N. Noble. It was in the same year that a report entitled "Case of Lithotomy of the Gall-Bladder" was published in the *Transactions of the Indiana Medical Society*.[2] This is the account of the historic operation performed upon Mary E. Wiggins as told by her surgeon.

Mary was "of spare habit, medium size, and nervous temperament." In 1863, when she was 27 years of age, she had felt an enlargement about the size of a hickory nut in the right lower part of her abdomen. Food and drink or exercise caused episodes of distress lasting three or four hours. The enlargement continued to increase in size and ultimately disabled her from walking. Early in

1867 it began to grow more rapidly and to cause greater trouble. She was obliged to give up her occupation of running a sewing machine and, in her own words, could not put her foot to the floor. By this time the tender mass filled the right side of her abdomen.

She visited several physicians, most of whom thought she had an ovarian tumor. Ultimately she consulted Dr. F. S. Newcomer who referred her to Dr. John S. Bobbs, the outstanding surgeon of Indianapolis and of Indiana. At the age of 57, he was a man of distinction in the community, having served as a professor of surgery, a Civil War surgeon, a civic leader, and, for one term, as a state senator.[4,5,9,10,12,16,17,20-22]

Bobbs' office was located at 15 East Washington Street in the heart of the rapidly growing city. Presumably this is where Mary Wiggins first consulted him. He made a careful examination, and concluded that the tumor had no connection with the ovary or with the other female organs. Being unable to make a diagnosis, he recommended and subsequently performed a second examination at a later date. This disclosed nothing new. He advised Mary Wiggins that the nature of the tumor was unknown and there was no assurance that it could be removed successfully. He was reluctant to recommend an operation, but Mary was exceedingly anxious to have something done for her relief. According to Bobbs, it was the courageous patient who insisted upon the operation. He says "She, however, so persisted in the request that I should undertake its removal, that I finally consented to make the attempt."

Surgery was a risky business in those days. There were no surgical hospitals, no operating rooms and no trained nurses. This was the year in which Lister in England published his two great reports describing the antiseptic method in surgery. However, few surgeons were familiar with the method in 1867. Fortunately, ether and chloroform were available for anesthesia.

The Great Event

Approximately one block away from Bobbs' office, at 26 South Meridian Street, there was a three-story building which housed Kiefer and Vinton's wholesale drugstore on its lower floors. On the third floor there was a bare barn-like room which was engaged to serve as an improvised operating room and patient's bedroom. An English woman was employed to attend the patient.

The historic operation was performed in this third floor room on June 15, 1867, under chloroform anesthesia. Bobbs was assisted and observed by seven physicians and a medical student. The incision was first made in the lower abdomen, but was subsequently lengthened upward and to the right. The surgeon came upon a large tense translucent mass, but could not tell where it arose. When he decided to open it he was not yet aware that it was a greatly distended gallbladder. When he cut through the thin wall, a large number of gallstones shot out with considerable force. A great many more were hooked out with the finger, but one was lodged so tightly that it could not be removed.

It was not until the sac had been emptied that the surgeon could draw it down and demonstrate its attachment to the liver above, thus establishing to his satisfaction that it was indeed the gallbladder. To attempt to remove it would have been unthinkable. Not knowing what else to do, Bobbs sewed up the opening in the gallbladder and then closed the incision in the abdominal wall. This was the first time that anyone had ever opened the abdomen and performed a surgical procedure of any kind upon the gallbladder. Bobbs published a report of the procedure the following year, and described it as a "lithotomy" of the gallbladder. Eleven years were to elapse before anyone else would do a similar operation. The term "cholecystotomy" was proposed by J. Marion Sims in 1878,[19] in his report of the second operation on the gallbladder.

Mary Wiggins survived the operation. If Bobbs had let her have her own way she might have recovered more quickly than she did, and with less discomfort. She was unable to empty her bladder after operation, and required catheterization on that day and subsequently. She was instructed to move about in bed as little as possible. On the second day after operation she begged to be allowed to get out of bed in order to urinate; this request was refused. On the morning of the fourth day the surgeon commented: "Have not permitted her to rise as she requested, the catheter having been used twice a day since the operation." That same evening he noted: "Began to complain of bladder soon after morning visit. . . . This continued all day, and at 5 o'clock she got partly out of bed and passed some urine. Can never pass urine unless in an upright position."[2] Hard-headed, obstinate doctors! It took us until the middle of the twentieth century to pay attention to the entreaties of our surgical patients that they be allowed to get out of bed!

On the sixth and seventh days the inevitable pus drained from the incision. The patient was much improved thereafter. She had begged for days for her clothing to be changed and this was permitted one week after operation. Her subsequent recovery was uneventful. In two weeks she was permitted to sit up, in three weeks to move about her room and in four to "ride out."

Bobbs died three years later, in 1870. It is likely that he and his colleagues were unaware of the historic significance of the cholecystostomy which he had performed. The operation is not mentioned in his obituaries, or in biographies written soon after his death.[12,20] It was many years before the medical world recognized

and acknowledged his notable contribution.

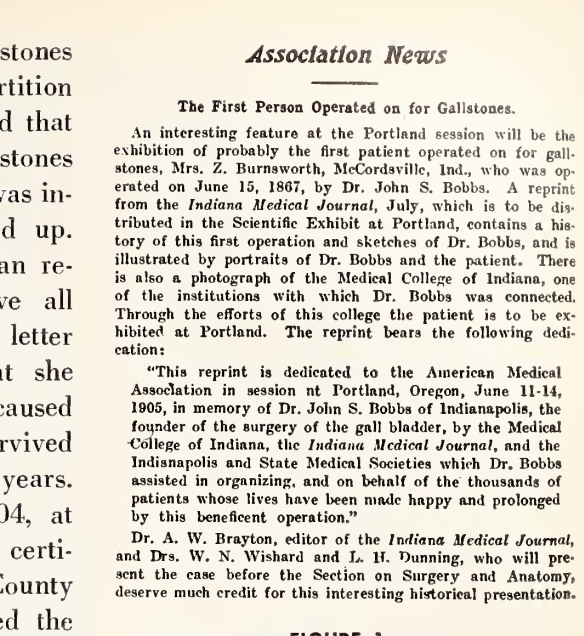
Mary Wiggins was 31 years of age at the time of her operation. Twelve years later, on May 14, 1879, she married John Ziba Burnsworth, or Burnworth,* son of George and Mary Burnworth, who lived and worked as a carriage maker at 140 Elm Street in Indianapolis.[14] She was then 43 years of age, while her groom was 28. After their marriage they lived briefly at 22 Elm Street.[15] Some time after 1880 they moved to McCordsville. There is no record of any children.

The Later Years

During the ensuing years Mrs. Burnsworth attracted the attention of Dr. William Niles Wishard, Dr. Alembert W. Brayton, and Dr. L. H. Dunning, all of Indianapolis. Dr. Brayton was at that time editor of *The Indiana Medical Journal.* In 1899[14] he wrote: "The patient, Mary E. Wiggins, now Mrs. Z. Burnsworth, is still living. Her husband is a patient of the present writer; he has been for several years a sufferer from keratosis buccalis. Under date September 25th, 1899, Mrs. Burnsworth writes: 'Will try answering your questions. My gall bladder was opened: between 40 and 50 stones were removed; there was a partition dividing one from the rest, and that one was left; the size of the stones was from a shot up to a pea. I was informed the bladder was sewed up. As to the doctors present, I can remember seven, but they have all passed out but one' . . . . The letter closes with the statement that she still has some trouble. 'I think caused by that one stone'." Mary survived her husband by more than nine years. He died on February 24, 1904, at the age of 53. His death was certified in the records of Marion County by Dr. C. J. Knerr, who listed the cause as actinomycosis of about 12 years duration.

In the following year, 1905, the American Medical Association held its annual meeting on June 11-17, in Portland, Oregon. A historical section had been added as a new feature at this session. Through the efforts of Drs. Wishard, Brayton, and Dunning, an exhibit was assembled to commemorate the historic contribution of John S. Bobbs to surgery. The exhibit was sponsored by the faculty of the Medical College of Indiana. It included copies of Bobbs' original report of his operation and of his presidential address to the Indiana State Medical Society[3], biographical articles relating to Bobbs and his operation, and portraits of Bobbs, of several of his associates and of Mrs. Burnsworth. The most notable feature of the exhibit, however, was the personal appearance at the Portland meeting of Mrs. Burnsworth herself.

It is evident that Dr. Wishard, more than anyone else, was responsible for her presence. In addition, he acted as her escort during the journey. She and her case history were presented to the association by Dr. Dunning. Reprints of an article by Dr. Brayton from the *Indiana Medical Journal*[5] were distributed during the meeting. This publication contained a biography of Bobbs, a reproduction of most of his original article, and various illustrations, including two photographs of Mrs. Burnsworth which had been taken by Dr. Wishard. Copies of this article were mailed to every surgeon of prominence in the United States and Europe. An announcement of the appearance of Mrs. Burnsworth at this meeting appeared in the *Journal of the American Medical Association* for July 8, 1905, under the heading "Association News" (Figure 1).[1]



Association News

The First Person Operated on for Gallstones.

An interesting feature at the Portland session will be the exhibition of probably the first patient operated on for gallstones, Mrs. Z. Burnsworth, McCordsville, Ind., who was operated on June 15, 1867, by Dr. John S. Bobbs. A reprint from the *Indiana Medical Journal*, July, which is to be distributed in the Scientific Exhibit at Portland, contains a history of this first operation and sketches of Dr. Bobbs, and is illustrated by portraits of Dr. Bobbs and the patient. There is also a photograph of the Medical College of Indiana, one of the institutions with which Dr. Bobbs was connected. Through the efforts of this college the patient is to be exhibited at Portland. The reprint bears the following dedication:

"This reprint is dedicated to the American Medical Association in session nt Portland, Oregon, June 11-14, 1905, in memory of Dr. John S. Bobbs of Indianapolis, the founder of the surgery of the gall bladder, by the Medical College of Indiana, the *Indiana Medical Journal*, and the Indisnapolis and State Medical Societies which Dr. Bobbs assisted in organizing, and on behalf of the thousands of patients whose lives have been made happy and prolonged by this beneficent operation."

Dr. A. W. Brayton, editor of the *Indiana Medical Journal*, and Drs. W. N. Wishard and L. H. Dunning, who will present the case before the Section on Surgery and Anatomy, deserve much credit for this interesting historical presentation.

FIGURE 1
ANNOUNCEMENT in The Journal of the American Medical Association of the presentation of Mrs. Burnsworth at the Portland meeting of the AMA in 1905.[1]

Mrs. Burnsworth was 67 years of age at this time, 38 years after her operation. Brayton describes her then as being "active, witty, well-read, intelligent and companionable." Little is known of her during the remaining years of her life. One reference[13] states that in 1909 she was visited at her home in McCordsville by Sir Alexander Simpson, professor of obstetrics at Edinburgh, who wished to hear from the patient herself the history of the case.

It is known that Mary's middle name began with E. In his report of the operation Bobbs referred to her simply as "E. W." However, her middle name is never mentioned anywhere. At the time she was born, no official birth records were kept in Indiana. Only two photographs of her are known to exist. Both were

* In most references to the patient, several of which were written during her lifetime and presumably read by her, her married name is spelled BURNSWORTH. In her newspaper obituaries and on her death certificate the name is spelled BURNSWORTH. The name on her husband's death certificate is John Ziba BURNSWORTH. However, on the tombstone the name is spelled BURNWORTH, omitting the *S.* Also, in Polk's *Indianapolis Directory* for 1879 and for 1880 the listing is BURNWORTH, without the *S.* It is quite possible that the correct spelling of the husband's name was Burnworth rather than Burnsworth. However, biographers of Bobbs have invariably referred to his patient as Mrs. Burnsworth and it seems best to continue to spell her name in this way. In *The Story of Crown Hill*[13] she is called "Mrs. Z. Farnesworth," while in Stone's article[21] the name is spelled "Barnesworth." Genealogists are familiar with these vagaries in the spelling of names.

taken by Dr. Wishard, and both of them first appeared in Brayton's article written in 1905, and in the reprints of this article which were distributed at the AMA meeting and by mail. This was the only publication ever to reproduce the photograph showing Mrs. Burnsworth standing on the front porch of her home in McCordsville (Figure 2). The other photograph (Figure 3) appeared also in *The Indianapolis Star* for Thursday, April 24, 1913, two days after Mrs. Burnsworth's death, and subsequently in an article by Rice[16] published in 1951. Brayton spoke of a large oil portrait of Dr. Bobbs and added that the medical college had also secured a portrait of the patient. A portrait of Dr. Bobbs and a photograph of Mrs. Burnsworth are presently in storage at the Indiana University Medical Center.

Mrs. Burnsworth died on Tuesday, April 22, 1913, in the Deaconess Hospital in Indianapolis.[8] She was 77 years of age at the time of her death, and had lived almost 46 years following her operation. According to Dr. A. L. Marshall, superintendent of the hospital, her death was caused by old age. Her death certificate, signed by E. M. Bennett, M.D., listed the cause of death as arteriosclerosis. Information on the death certificate is meagre: the names of the father and mother and the date of birth of the deceased are omitted; the age of the deceased is given incorrectly as 80.



FIGURE 2
PHOTOGRAPH of Mrs. Burnsworth taken on the porch of her home at McCordsville. (Reproduced from Indiana Medical Journal 24:29, July, 1905.)



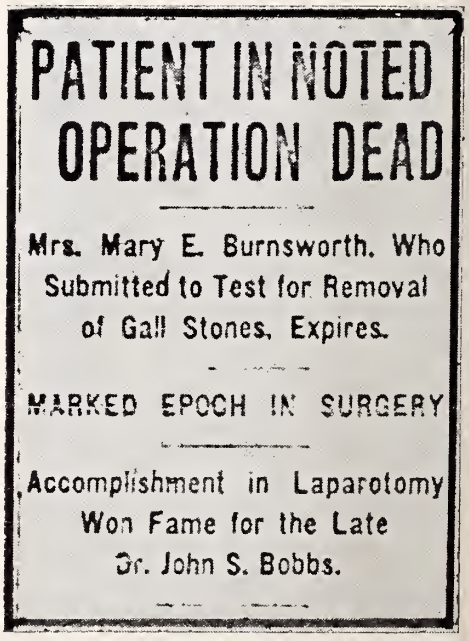
FIGURE 3
PHOTOGRAPH of Mary Wiggins Burnsworth taken shortly before her presentation to the American Medical Association in Portland. (Reproduced from Indiana Medical Journal 24:38, July, 1905.)

Two days later, *The Indianapolis Star*[8] for Thursday, April 24, devoted a full column on the front page to an obituary of Mrs. Burnsworth and to a description of the historic event in which she had participated (Figure 4). The headline read "PATIENT IN NOTED OPERATION DEAD—Mrs. Mary E. Burnsworth, Who Submitted to Test for Removal of Gall Stones, Expires. MARKED EPOCH IN SURGERY." Her photograph was reproduced prominently on page three. Both the newspaper and the death certificate stated that burial would be at McCordsville. Dr. Wishard had attempted to keep track of Mrs. Burnsworth during her later years, and had secured from her an assurance that an autopsy would be allowed when she expired. However, she died while Dr. Wishard was out of the city, and she had already been buried when he first learned of her death.[24]

A final statement concerning Mrs. Burnsworth appears in a biography of Bobbs published in 1951 by Dr. Thurman B. Rice,[16] distinguished historian of Indiana medicine. He says "She is buried at McCordsville and a marker by the side of State Road 67 near that village calls the attention of the public to the heroic role she played."

Epilogue

In June, 1966, my wife and I drove from our home in Dallas to Indianapolis to seek additional biographical information concerning John S. Bobbs and to visit the sites where he had lived and worked. We also proposed to visit and photograph the grave of Mary Wiggins Burnsworth. Her obituaries in the Indianapolis newspapers, her death certificate and every biographical reference stated that she was buried at McCordsville. It was there we went to seek her grave.


PATIENT IN NOTED OPERATION DEAD

Mrs. Mary E. Burnsworth, Who Submitted to Test for Removal of Gall Stones, Expires.

MARKED EPOCH IN SURGERY

Accomplishment in Laparotomy Won Fame for the Late Dr. John S. Bobbs.

FIGURE 4
HEADLINE from the front page of The Indianapolis Star for Thursday, April 24, 1913.

McCordsville is about 15 miles from Indianapolis on State Road 67. A mile or so before one reaches the city, he crosses from Marion County into Hancock County. On our way there, we watched both sides of the road, hoping to see the commemorative marker which Dr. Rice had described. Failing to find it, we drove on for five miles or more beyond the town, and searched that portion of the road without success.

Upon returning to McCordsville, we learned that the cemetery was located a few blocks southeast of the center of town. We went there, confident that we were about to see the grave of Mrs. Burnsworth. We were concerned to find that many of the marble grave markers were eroded so badly that it was impossible to read the legends upon them. We inspected each grave at least twice without finding the name Burnsworth. We inquired of various residents of the community, but no one knew of a list of individuals buried in the cemetery and no one remembered the name Burnsworth. We were advised, however, that there was a second cemetery, older and smaller, on the other side of town.

We went there hopefully—just a few blocks northwest—across the railroad track and down the parallel dirt road, and here we were confronted with a scene of utter desolation—an abandoned cemetery—an unfenced area in an untended, weed-filled lot. The graves had been desecrated, the tombstones broken down and scattered here and there, and much of it was overgrown with brush. We searched as best we could, fearful that we might discover the grave we sought in this forlorn spot. We were actually relieved that we did not find it.

On our drive back to Indianapolis, we searched the roadside deliberately, looking for the commemorative marker. In a few places it looked as though the main road might have been re-routed, so we went off on side trips at such points. We never found the marker, and its whereabouts is still unknown today. We assumed that the inevitable widening and straightening of highways must have destroyed it or bypassed it. The Indiana Junior Historical Society has no record of it, and it is not mentioned in the latest bulletin on historical markers in Indiana.[23] Perhaps it will be found someday.

We returned to Indianapolis, disappointed and not knowing where to look next. We had given up the search for the highway marker, but were still hopeful that we might find the grave. We decided to go through all our reference material again. In an article written by Stone[21] of Indianapolis and published in 1894, we came upon this statement: "Mrs. Barnesworth [sic], the lady upon whom the operation was performed, more than a quarter of a century ago, is at this date (1893) still living, and resides near the village of Oaklandon, about 20 miles east of Indianapolis, and her physician, Dr. Kimberlin, states that she often refers to the ordeal, and its happy termination, as the great event of her life."

Oaklandon is approximately 12 miles from Indianapolis, in Marion County, on State Road 67, and is two or three miles southwest of McCordsville. Early the next day we drove out to Oaklandon, where we stopped at a filling station on the main road to ask our way. We were directed to the cemetery north of town. We were also advised to stop at the second house on the right and talk to Mrs. McCord, a widow whose husband had been an undertaker and who had helped to supervise the cemetery.

Mrs. McCord acknowledged that she knew the location of most of the graves in the cemetery. She recognized the name Burnsworth immediately, and gave us precise directions to find a tombstone with this name.

The Oaklandon I.O.O.F. Cemetery, opened in 1899, is located on Rural Route 12, seven-tenths of a mile north of the intersection of this road with State Highway 67 at Oaklandon. It is large, fenced, well-tended, and adorned with trees and flowers. We drove down the main road of the cemetery to the circle, where we turned right; then down a little gully, up again, and there, immediately by the road on the left, was the grave that we had been seeking (Figure 5).

On June 7, 1966, the day of our visit, the peonies* were in bloom, and their vivid colors could be seen throughout the cemetery. These hardy perennials live for many years, and it occurred to us that some of the same flowers might have been there when Mary Burnsworth was laid to rest.

The substantial and well-preserved granite tombstone bore the name BURNWORTH, omitting the *S*. The inscription was as follows: Ziba Burnworth. Sep. 26, 1850 - Feb. 24, 1904. Mary E. his wife, Jan. 31, 1836 - Apr. 22, 1913. The individual graves were not marked. There was nothing to indicate that the woman who lay buried there had been one of the central figures in an event of enduring historical significance.

Jane Todd Crawford and Mary Wiggins Burnsworth achieved heroism in ways which were remarkably similar. Each of them is buried in a rural Indiana cemetery. The grave of

* The peony is the state flower of Indiana. There is a legend in mythology that Apollo used this flower to cure the wounds of the gods.



FIGURE 5
The grave of Ziba and Mary E. Burnworth, or Burnsworth, at Oaklandon I.O.O.F. Cemetery. (Bass Photo Co., Indianapolis.)

each was lost and forgotten for many years.

In Kentucky some recognition of the contribution of Jane Todd Crawford finally came.[6] In 1932, the state of Kentucky named the road from Greenburg to Danville the Jane Crawford Trail. This is the highway over which she rode to and from the operation. In 1935, a monument to Jane Crawford was placed in McDowell Park* in Danville by the Kentucky State Medical Association. In 1942, the General Assembly of the Commonwealth of Kentucky designated December 13 as Jane Todd Crawford Day.

On May 12, 1940, National Hospital Day, the Indiana Hospital Association erected a granite marker at the grave of Jane Todd Crawford in Graysville. With this single exception there is no visible memorial in Indiana to either of these women — nothing to tell of the courageous role that they played in the development of modern surgery. Some day the state of Indiana may recognize and honor these pioneer heroines appropriately. Perhaps the medical societies might help.

In the months since our visit to Oaklandon, as we have driven along the rural roads of this country and have seen here and there the multitude of ancient small cemeteries which dot the countryside, my wife Willie and I have been reminded fondly of our sentimental journey to Indiana and have recalled again that verse of Thomas Gray's elegy which proclaims:

"Perhaps in this neglected spot is laid
Some heart once pregnant with celestial fire:
Hands that the rod of empire might have swayed,
Or wak'd to ecstasy the living lyre."

* The monument was moved later to the garden of the McDowell house.

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Letter to the Editor

April 14, 1967

I am grateful to you for publishing my two articles dealing with Dr. John S. Bobbs and with his patient, Mary Wiggins Burnsworth. In 1967, the centenary of Bobb's notable contribution to abdominal surgery, it is gratifying that he should receive some recognition in the medical journal which he helped to establish. It is also appropriate that a memorial tribute to him and to his patient should be published in Indianapolis, since this is the city in which the historic operation was performed.

In June, 1966, my wife and I came to Indianapolis in search of biographical data concerning Dr. Bobbs and his patient. Wherever we went in this friendly city we encountered gracious people who were sympathetic and cooperative. Subsequently there were other individuals whom we came to know through the exchange of letters. It would be prohibitive to undertake to list all the people in Indianapolis who have provided bits and pieces of information. Without their help these manuscripts scarcely could have been written. Since we are indebted to so many, we wish to impose upon you to publish an expression of our thanks and an acknowledgment of our obligation.

Miss Irene Mischler, head of the Social Sciences Division of the Indianapolis Public Library, has supplied a wealth of essential information. I am grateful to her, to her associate, Mrs. Alice Payne, and to Mr. Harold J. Sander, director of the library. I am similarly indebted to the personnel of the Indiana State Library, and especially to Mrs. Ferne D. Roseman, assistant in the Indiana Division.

We received a cordial welcome in the home of Mr. and Mrs. Julian Bobbs. Here we were privileged to see a portrait of John S. Bobbs painted when he was a young man. Mr. Bobbs encouraged our biographical studies and provided much information about his illustrious relative.

A steady flow of valuable reference material has been received from Dr. William Niles Wishard, Jr., of Indianapolis. Dr. Wishard's grandfather was one of the individuals principally responsible for establishing and publicizing Bobbs' priority in the field of gallbladder surgery.

To the best of my knowledge there are only two photographs in existence which show the actual building and the street where Bobbs' operation was performed. We found them after a lengthy search. They were made some time between 1870 and 1891 and were supplied through the courtesy of Mr. John C. Rugenstein, commercial photographer of Indianapolis. Other old photographs of historical interest were obtained from the files of the Bass Photo Company. We are indebted to Mr. Frederick Able of that company for excellent contemporary photographs of Indianapolis, McCordsville and Oaklandon.

Others who contributed to the study in various ways, and to whom we are truly grateful, include the personnel of the following: the Indiana State Board of Health, the Indiana Historical Library, Eli Lilly and Company, the Marion County Health Department, the Hancock County Health Department, the Indiana University Medical Library, the Indiana State Medical Association, the library of *The Indianapolis Star and News,* the Chamber of Commerce of Indianapolis, the Indiana Junior Historical Society, the Crown Hill Cemetery, the State Life Insurance Company, the Railroadmen's Federal Savings and Loan Association and L. S. Ayres and Company.

And finally, Dr. Ramsey, I am especially anxious to express my appreciation to you, to your Assistant Editor, Mrs. Jackie Stahl, and to your entire editorial staff. You have been tolerant, indulgent, and cooperative beyond the reasonable expectation of any temperamental author.

Sincerely yours,

(Signed) Robert S. Sparkman, M.D.
1004 North Washington,
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The Cancer Program at Indiana University School of Medicine—1966-1967

THE purpose of the American Cancer Society Institutional Grant is to foster cooperation and excellence in cancer research in both clinical and basic sciences in the medical school. The institutional grant is administered by the Dean's Committee, under the direction of George Weber, M.D., Cancer Coordinator of Basic Research, and Robert J. Rohn, M.D., Cancer Coordinator for Clinical Research. The members of the committee participate on a rotation basis and representatives are selected from basic and clinical sciences from both Indianapolis and Bloomington campuses of Indiana University.

With this institutional grant, the cancer committee supports the following activities:

(1) A series of internationally known clinicians and basic scientists lecture to the faculty and medical and graduate students in order to present the newest advances in cancer research and treatment. These lecturers give seminars in the Cancer Research Society of Indiana University School of Medicine or in the Dean's Hour at the medical school.

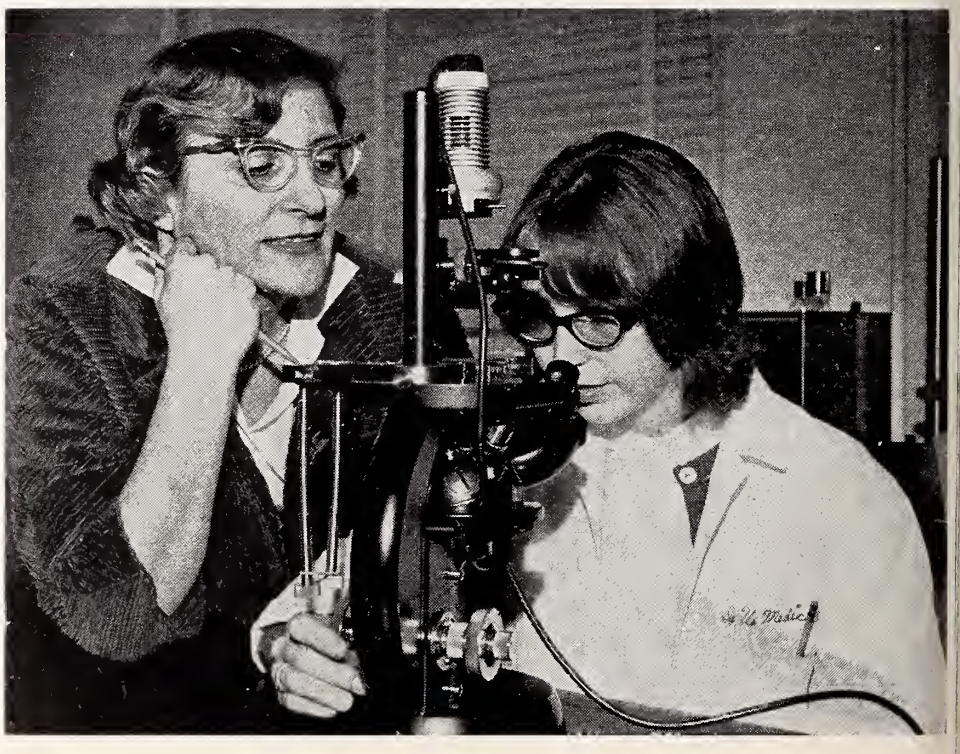
(2) An annual Cancer Research Conference takes place at the school of medicine. This Cancer Day provides an opportunity to cancer investigators of the Indianapolis and Bloomington campuses to meet and present results of clinical and basic research. It gives an opportunity for the younger people to present their research work and to exchange information with the more advanced investigators.

(3) One of the most important functions of the institutional grant is to provide grants to start out young investigators in cancer research. These small grants are used as "seed money" until the investigator is able on his own to obtain support for his cancer work from a national agency.

The current institutional grant allocation supports the following research projects:

Research on the genetic aspects of malignancy is carried out in the Department of Medical Genetics by Dr. Catherine G. Palmer and M. M. Cassle, senior medical student. They describe their project in the following terms:

> The Morris hepatomas comprise a collection of tumors of varied malignancy and corresponding biochemical characteristics. The cell populations have not been widely investigated chromosomally nor have long-term culture characteristics been defined. Therefore we have cultured a number of hepatoma strains *in vitro* (Strains 3683, 5123D, 5123TC, 7800, 7288TC and 3924A).
>
> In culture, the strains of hepatomas seem to retain their characteristic growth rates and each shows a characteristic cell morphology. The most rapidly growing tumor cells exhibit a rounded cell shape in an easily detached cell sheet. There is a layering of the cells with continued growth with no tendency for cell migration. Cells with slower growth rates are flat and elongated and form cell sheets which are well attached to the glass culture bottle. In the two cell strains — 3683 and 3924A — which were followed for over 508 days, the cell morphology of each strain changed to a rounded cell body with elongated appendages.
>
> The hepatomas vary in their modal chromosome number and in their karyotypes. Strains 5123D and 7800 appear to be diploid, having the 42 chromosomes characteristic of the rat. Strain 3924A shows a modal number of 39 with no chromosomal aberrations. The



DR. Catherine G. Palmer and M. M. Cassle.

number of chromosomes in strain 3683 varies from 34 to 42, with most cells possessing 38 chromosomes. Frequent chromosomal abnormalities are seen in this strain. Strain 7288TC is predominantly polyploid in culture with a modal number of 66.

Of the two strains — 3924A and 3683 — which were followed in culture for over 508 days, the former showed an interesting change in morphology and a shift in the modal chromosome number. This strain became predominantly polyploid with a mode of 68 chromosomes. When it was injected back into rats, no tumors resulted. It is possible that the cells growing in culture represent normal stromal cells which have overgrown the slowly-growing tumor cells and have themselves altered in culture.

The malignant characteristics of the other hepatomas are well illustrated in tissue culture. These characteristics, such as lack of contact inhibition, heteroploid chromosome numbers and karyotypic abnormalities correlate well with the variations in growth rate of the tumors seen *in vivo*. The cultured cells are to be reinjected in rats to define their malignancy and biochemical characteristics after culture. This type of approach enables one to simulate the population changes occurring in tumor progression *in vivo*, as well as permitting the investigation of chromosomal variations in increasing malignancy.

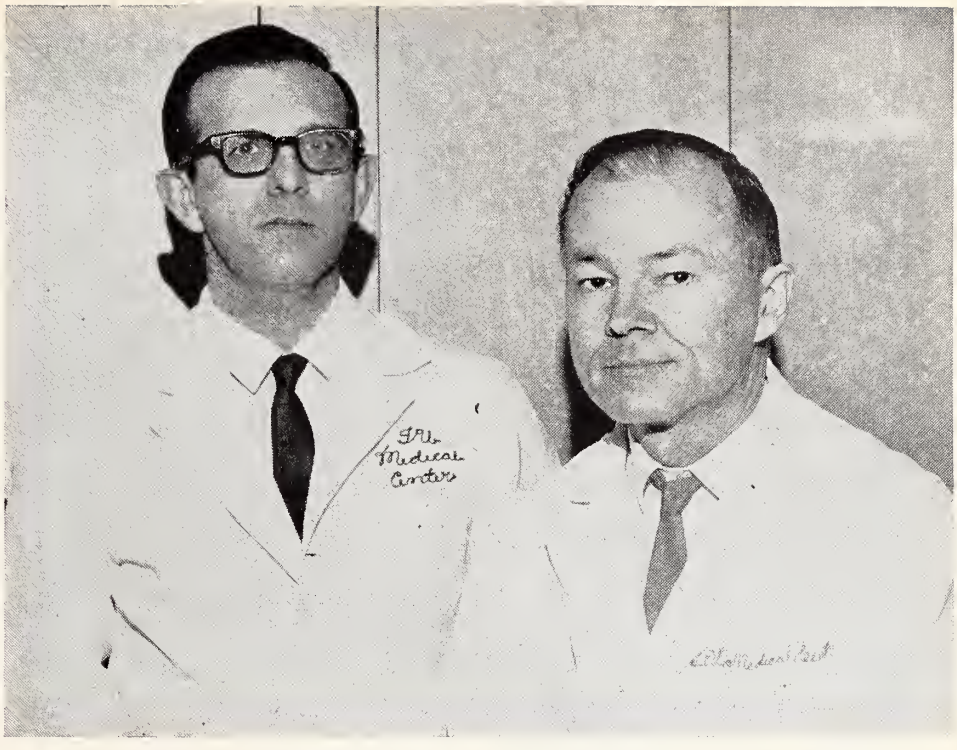
Dr. Palmer is also interested in an important new aspect of leukemia, the so-called "radiation leukemia protection factor." Dr. Palmer describes her work as follows:

RLP, radiation leukemia protection factor, has been found in sheep spleen and in sheep and bovine serum. It has been found to be active in protecting mice from irradiation-induced leukemias and is currently being biochemically analysed by M. E. Hodes and D. Clewell. The biologic action of these fractions has not been widely studied. We know that x-ray leukemias are often chromosomally abnormal, and that chromosomal aberrations are also frequently seen after irradiation. We are studying the effect of RLP on cell populations immediately post-irradiation and during leukemogenesis.

Acutely irradiated mice treated with RLP show the same frequency of aberrations and no change in mitotic indices from irradiated untreated mice. Thus RLP does not produce an initial repair of chromosomal aberrations or a stimulation of mitosis.

We are now studying cell populations of the developing leukemias in thymus and bone marrow to determine whether RLP selectively inhibits certain types of cells during irradiation leukemogenesis.

Knowledge of whether RLP acts in preventing mouse leukemia by inhibiting chromosomally aberrant cells would add a significant contribution to our knowledge of the role of chromosomal anomalies in malignancy, a still confused issue.



FRANK PADGETT and Dr. Paul Figard.

Virological Aspects

The electron microscopy and virological aspects of tumors in animals are explored in the Department of Microbiology by Dr. Paul Figard and Frank Padgett. They describe their research project as follows:

Our studies are concerned with the investigation of tumors induced by viruses. Although no human cancers have been definitely proven to be caused by viruses, many researchers believe that some types, especially the leukemias, may result from a virus as they do in experimental animals. For this reason the role of the virus as the infecting agent is of great importance. To understand the action of the virus, it is necessary to know much more about its structure than is presently known.

Part of the work carried on in our laboratories has been concerned with an electron microscopic examination of the ultrastructure of tumor viruses. The most recent study has been done with the Rauscher virus which produces leukemia in mice. By the use of snake venom, it has been possible to break down the virus par-

ticles. This has revealed part of their internal ultrastructure which was previously unknown. This work is being continued and a more complete picture is being obtained of the parts of the virus particles and how they are put together. This should lead to a better understanding of how the virus transforms the normal cells to cancer cells.

Another part of our studies deals with the changes in the metabolism of tissues which have become malignant. Our most recent work in this field has been an investigation of the interrelations of lipid and carbohydrate metabolism in tumors as contrasted with normal tissue. We find that when glucose is added to a palmitate incubation medium, the tumors shift from the palmitate to glucose as their principal source of energy. This does not take place in the normal tissue from which the tumors originated. Furthermore, at the same time that the shift in energy source occurs in the tumor, there is an increased utilization of the fatty acid for esterification into the complex lipids of the tumor. We believe that this interrelationship of lipid and carbohydrate metabolism in these tumors is connected to the corresponding changes that occur in the metabolism of the tumor host as is evidenced, for instance, in the well-known loss of weight and adipose tissue in cancer patients even in the presence of adequate carbohydrate intake.

It is hoped that all of these studies will eventually add to the results of other investigators to yield a solution to the complex cancer problem.

Brain Tumors

Brain tumors represent one of the most rapidly progressing neoplasms which unfortunately are quite resistant to present-day treatment. Research in this area is carried out in the Department of Pathology by Dr.



DR. J. Ciembroniewicz.

J. Ciembroniewicz, who describes his approach in the following:

Glioblastoma multiforme is the most malignant intrinsic cerebral neoplasm with patient survival rarely exceeding six months. Radical surgical excision, x-ray treatment or anti-metabolic drugs do not significantly alter the biological course of this disease. The present study is concerned with immunological properties, if any, of these tumors. Lymphocytes are the essential factors in the delayed immune response, of particular relevance in graft rejection. Investigation utilizing tumor tissue culture and their interaction with lymphocytes from a tumor donor were initiated. These ecologic reactions were evaluated both qualitatively and quantitatively as to the number and biologic activity of the stimulated lymphocytes. In this respect, tritiated RNA and protein precursors were demonstrated by autoradiography. Preliminary results indicate that glioblastomas are immunologically active. In some cultures hitherto unreported, eosinophilic response was noted. Further research should be carried out to determine what protein fractions are responsible for this immunologic response.

Tumor-Host Relationship

A tumor-host relationship is an important area of investigation because of its significance in both diagnosis and treatment of neoplastic disease. Research in this area was carried out by Dr. J. C. Christian of the Department of Medical Genetics who describes his work as follows:

Neoplasms have been shown to affect the metabolism of amino-acids, hormones, carbohydrates and triglycerides. Some of these effects are nonspecific and related to malnutrition while others, such as tumors which secrete adrenocorticotropin or insulin-like substances, have a very specific effect on normal metabolism.

Phospholipids are an integral part of all cell membranes and also function to transport other lipids throughout the body in conjunction with serum lipoproteins. Rapidly growing tumor cells may upset the metabolism of phospholipids in the body as a whole. Serum and red blood cell membranes are being quantitatively determined in controls and patients with various types of malignancies to test this hypothesis.

It is hoped that a difference will be discovered that will be useful in



DR. J. C. Christian

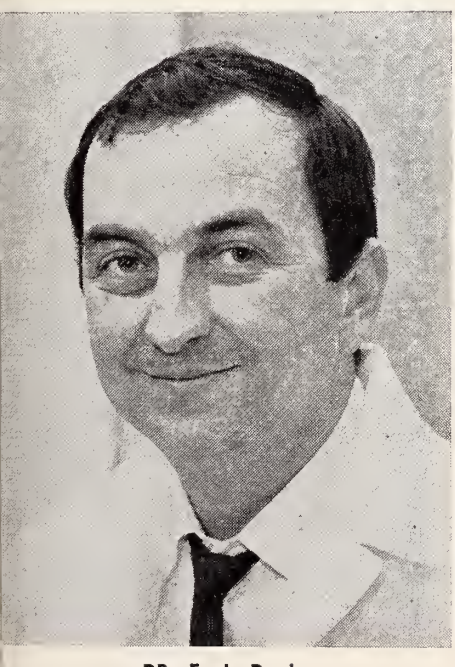
early diagnosis and treatment of malignancies.

The Krebs Cycle

The cancer cells have a disturbed intermediary metabolism. One of the key mechanisms in metabolism is the Krebs cycle or citric acid cycle. Dr. E. J. Davis of the Department of Biochemistry carries out investigation of the mechanisms which control the citric acid cycle. Dr. Davis describes his project as follows:

Biochemical expressions of the intracellular control of energy metabolism form the framework for the present study. With regard to energy requirements, a constant and large supply of reducing equivalents, and of adenosine triphosphate, in addition to the appropriate enzyme systems, is necessary for cells carrying out extensive biosynthetic processes.

It is well known that, in the earlier stages of their development, malignant cells have a very similar enzyme pattern and physical appearance to that of the host cells, but in more advanced stages, the cancerous cells become less easily identifiable as to their original source. In any case, the two conditions, a ready supply of (1) reducing equivalents and (2) ATP, must be met. In "minimal deviation" tumors, or in the very early stages of malignant growth, these two substances can probably be produced in adequate supply by the deviate cells themselves, but in more advanced stages, they tend to become more anaerobic, probably due to an inadequate blood supply. This being the case, such deviate cells would appear to obtain much of their energy from external sources. In addition, the usual controls (feedback inhibition, substrate competition, control of the supply of "critical" intermediates) adjusting the metabolism of the cell to a balance between catabolic and anabolic processes seem to have been lost.



DR. E. J. Davis

In the present investigation, detailed studies are being carried out of control of energy metabolism by normal cells. Some recent observations which the author considers important aspects of control are as follows: (1) The presence of a very low activity of the enzyme glutamic dehydrogenase in heart mitochondria serves as an important control for the catabolism of carbohydrate and fatty acids; (2) acetoacetate, the main end-product of fatty acid oxidation in liver, very greatly diminishes the oxidative metabolism of the isolated surviving heart, and of heart mitochondria. Since glutamate (in the mitochondrial system) reverses this effect, the site of action of acetoacetate appears to be to make the steady-state level of oxaloacetate rate-limiting for the citric acid cycle. These studies, therefore, pinpoint such pathways as glutamic dehydrogenase (i.e., anaplerotic pathways) as important control points for energy production in this tissue; (3) malonate, a potent inhibitor of succinic dehydrogenase, completely blocks the citric acid cycle. Nevertheless, it has been noted that, in heart mitochondria, malonate does not completely block the oxidation of pyruvate, the end-product of glycolysis. Very recent studies have demonstrated that this malonate-insensitive respiration is completely accounted for by what is, in effect, an acetoacetyl-CoA deacylase. In detail, the latter activity is the combined actions of CoA transacylase and succinyl-CoA synthetase, which lead to a stoichiometric formation of acetoacetate from pyruvate, with a recycling of coenzyme A. This latter study clearly shows that, under the conditions stated, heart muscle is completely incapable of the net synthesis of the four-carbon intermediates required for the citric acid cycle.

Further considerations which are inferred from these studies are: (1) what other possible sources of citric acid cycle intermediates can be derived from the blood? and (2) what influence can selective permeability on such substances have on the energy metabolism of cells? One inference from these latter points is that malignant cells have lost their ability to discriminate with regard to extracellular sources of energy. That is, their selective permeability to normal metabolites, and therefore, an important source of homeostatic control could have been lost.

Effects of Anemia

The tumor-host relationships are under investigation by Dr. N. Hugo of the Department of Plastic Surgery. He investigates the effect of anemia on the processes of regeneration involved in wound healing. Dr. Hugo describes his work as follows:

A significant number of patients with cancer, especially of the gastrointestinal tract, enter the hospital with an anemia of long-standing duration. This group of patients has a particularly high incidence of postoperative wound dehiscence. It has been claimed that anemia is one of the factors which plays a role.

The effect of anemia on wound healing is not well documented. Reports by clinical investigators (Mason, 1939; Howes, 1939; Hartwell, 1955; Guiney, 1966) have stressed the increased incidence of wound dehiscence in patients with anemia. Some experimental data (Sanborn, 1944 and Bains et al., 1966) has corroborated these clinical impressions while others have revealed no relationship between anemia and wound healing (Waterman et al., 1952; Besser and Ehrenhaft, 1943). However, these induced anemias were all of the acute variety (five weeks being the longest). In addition, tensile strength determinations have been made on sacrificed animals.

Thirty-five randomly selected white New Zealand male rabbits have been maintained chronically anemic by intraperitoneal phenylhydrazine injections. After 12 weeks, mid-dorsal incisions were made. The tensile strengths of the wounds will be determined at six, nine and 12 days by a modified strain gauge accurate to plus or minus one percent. These results will be statistically compared to the tensile strength of wounds in a comparable group of randomly selected controls.

Viruses

Viruses can cause tumors in animals, however, it has never been proven that virus can cause cancer in man. This interesting area of investigation is explored by Dr. Lily Chung Yip of the Departments of Medicine and Biochemistry. She describes her project in the following words:



DR. Lily Chung Yip

A number of animal tumors are caused by viruses, and it is thought likely that at least some human tumors are caused by these microscopic agents. We have been studying the effects of two viruses that cause solid tumors in rabbits. One of these is the Shope fibroma virus.

One approach to the viral tumor problem is to study the biochemical changes occurring after infection. Viruses often induce enzymes, particularly those enzymes concerned with nucleic acid metabolism. Some of these enzymes are anabolic, others catabolic in function. There are reports in the literature that the catabolic enzymes are decreased in cancer. We are studying the deoxyribonucleases (DNase) of tumor tissue and comparing them with normal tissue, at various times after viral infection.

Preliminary studies are under way with normal tissue. One of the DNases is inhibited by high concentrations of nucleic acid derivatives. We are interested in determining whether this is a general phenomenon, or whether the tumor enzymes differ from the normal enzymes in their susceptibility to this inhibition. These studies should help determine the differences between normal and cancer cells, and the mechanisms of control of nucleic acid used by each type of tissue.

In closing this brief description of the current projects supported by the American Cancer Society Institutional Grant at Indiana University School of Medicine, I would like to say that the program at this school has greatly benefited from this support. The cancer research is progressing towards the goal of combating and ultimately defeating this dread disease. ◀

George Weber, M.D.
Chairman, Institutional
Cancer Committee and
Professor of Pharmacology
Indiana University
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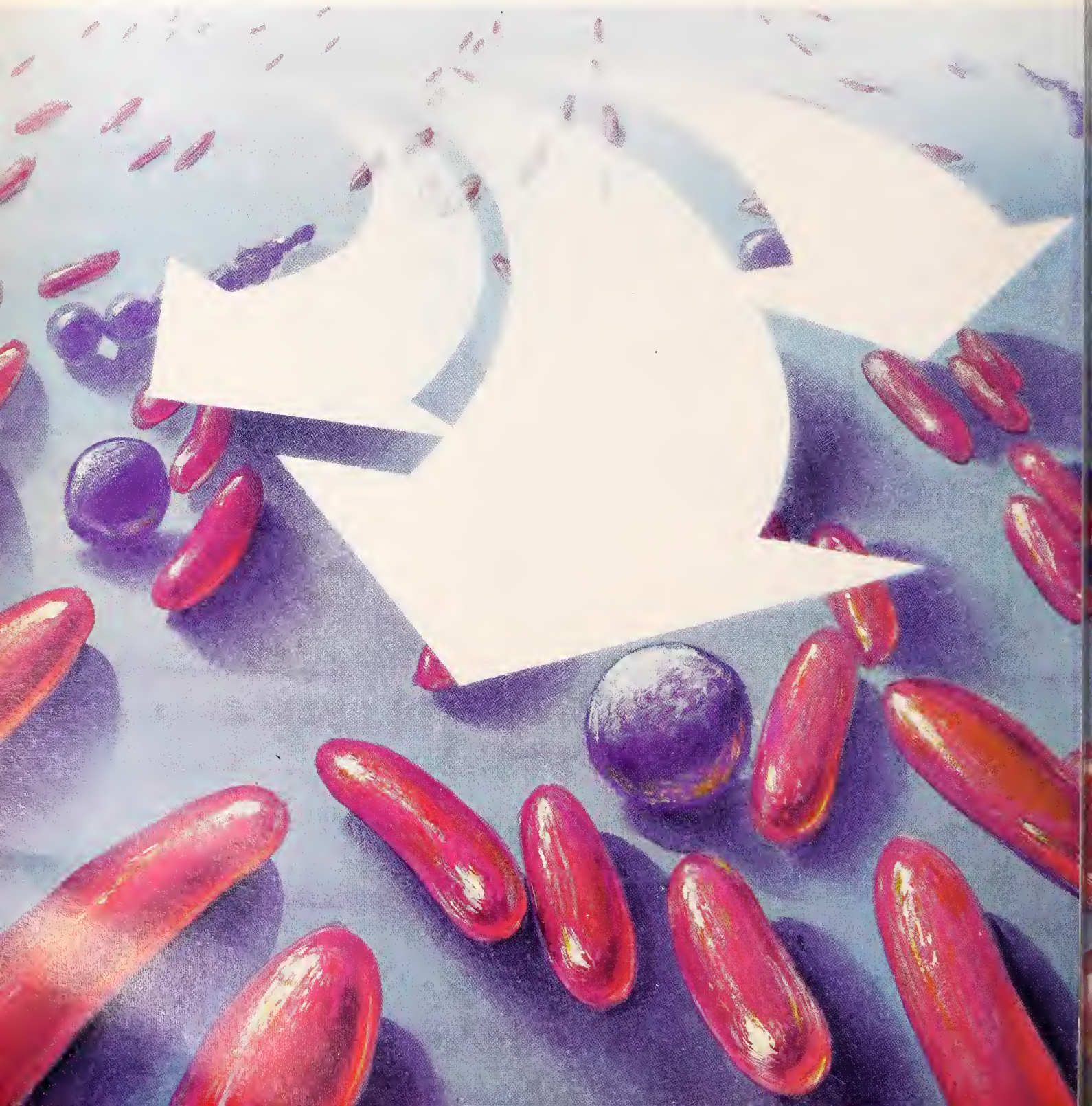
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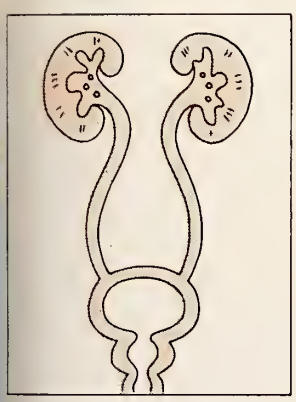
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1. Peters, J. H.: *J. Urol.*, *87*:747, 1962. 2. Draper, J. W., *et al.*: *South. M. J.*, *57*:920, 1964. 3. Stewart, B. L.: *J. Urol.*, *87*:491, 1962. 4. Hagstrom, R. S.: *Rocky Mountain M. J.*, *59*:(2), 37, 1962. 5. Arnold, J. H.: *Clin. Med.*, *71*:552, 1964. 6. Nelson, C. G.: *Colorado GP*, *3*:(3), 2, 1961.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

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Precaution—Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

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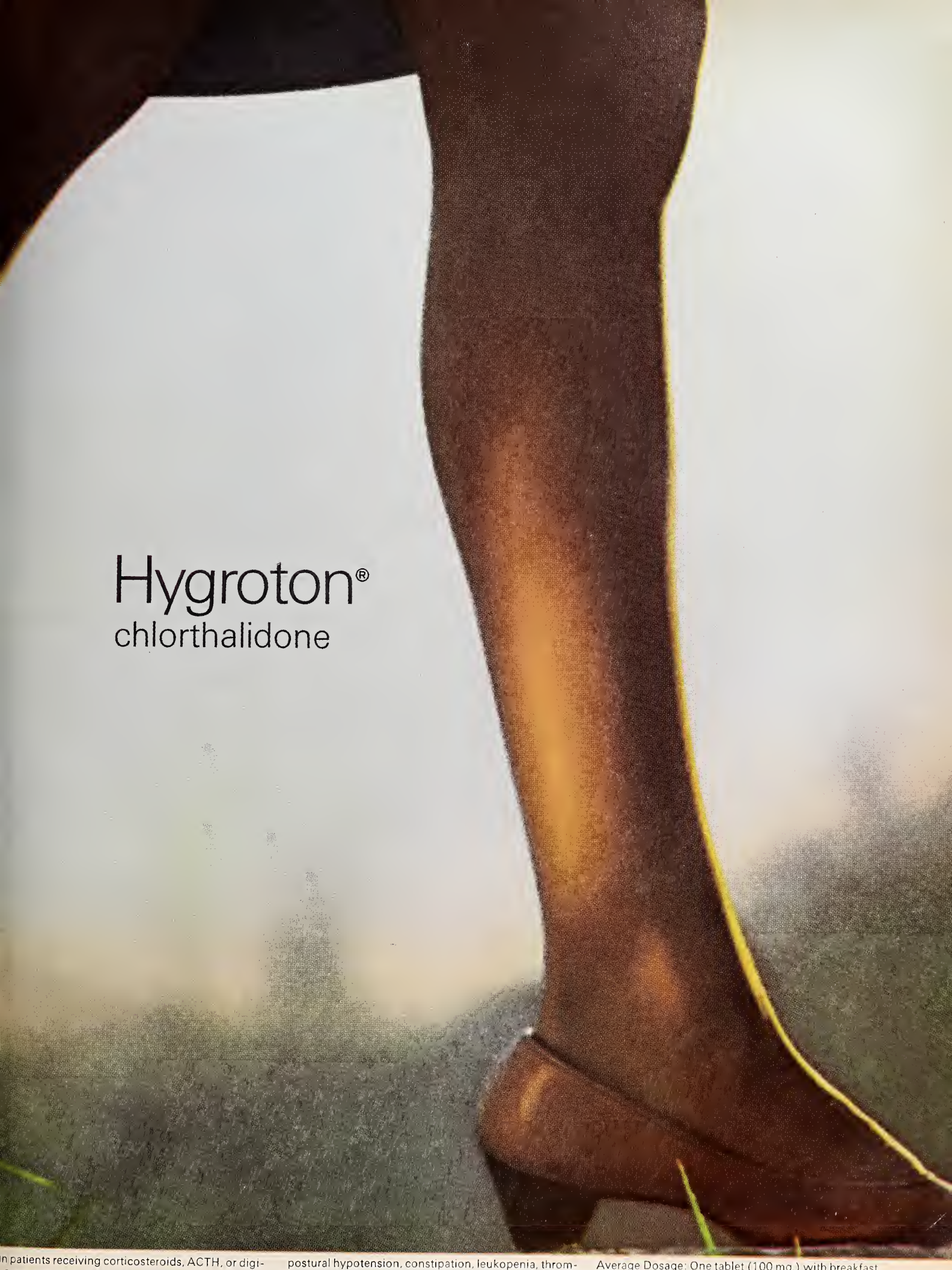
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Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease.



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Effects: Dizziness, weakness, nausea, vomiting,
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27

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Traumatic Rupture of the Aorta

ERICH K. LANG, M.D.
*Indianapolis**

A 51-year-old white female was admitted to the emergency room with multiple fractures of the extremities, the lumbar spine and the thoracic cage. Surgical shock dominated the clinical picture during the entire hospitalization of the patient. In view of the type of accident and location of impact, the profoundness of the surgical shock and deterioration of condition, a rupture of the descending thoracic aorta was suspected. An emergency venous aortogram was performed (Figure 1).

A large 8 bore NIH catheter was introduced into the right antecubital vein and advanced under fluoroscopic control into the right atrium. Eighty ccs. of Angio-Conray were injected into the right atrium, and serial films were obtained in a right posterior oblique projection, covering a 15-second time period. The left heart phase of the dye study demonstrated the left ventricle, the ascending aorta, the brachiocephalic vessels and the descending thoracic aorta. A tear of the descending thoracic aorta was apparent just distal to the aortic knob. The pulmonary phase demonstrated depression of the left lung by what appeared to be a huge, probably extrapleural, hematoma, filling the entire left upper hemithorax. Displacement of the subclavian artery by this huge hematoma was also noted.

A thoracotomy was speedily performed, however, the patient succumbed, after two cardiac arrests had been reversed, to a third irreversible cardiac arrest.

Comment

Venous aortography is a procedure recommended for the speedy assessment of not only the pulmonary circulation, but also the left-sided arterial circulation. Adequate dye density can be achieved by injection of a large bolus of high density contrast material into the right atrium or right ventricle, appropriately timing the exposures to record the arterial phase of the dye study. The method is most opportunely employed for assessment of transection of the aorta or formation of aneurysms of the brachiocephalic vessels following trauma. The typical bamboo deformity of the descending thoracic aorta demonstrated on such antegrade venous aortograms is characteristic for a circumferential transection of the aorta often maintained in place only by the adventitia. The point of the actual extravasation can be identified on the aortogram; a huge extrapleural hematoma is often associated with rupture of the aorta.

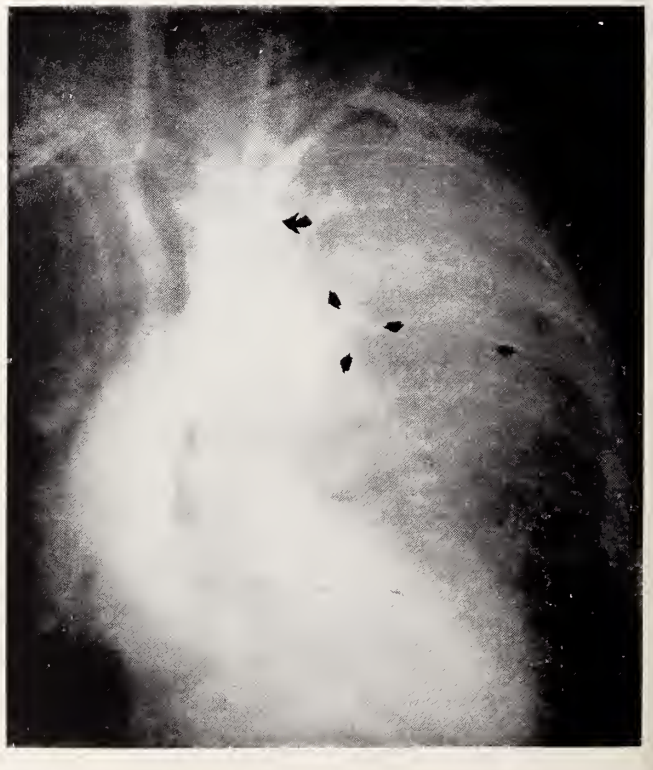


FIGURE 1
THE arterial phase roentgenogram of a venous aortogram demonstrates extravasation of dye from a tear in the descending thoracic aorta just below the aortic knob. The pulmonary veins are still opacified and there is marked depression of the left upper lobe. This is felt to be caused by a huge extrapleural hematoma filling most of the left upper thoracic cage. Displacement of the first and second portion of the left subclavian artery by this hematoma is likewise noted.

* Radiologist, Methodist Hospital, Indianapolis 46207.

The ease and rapidity with which this procedure can be performed and the safety founded upon catheterization of the normal right ventricular and right-sided cardiac system, thus avoiding the danger of retrograde passage of a catheter or guide wire through an area of possible transection of the aorta, are the main advantages of this procedure. Even in a patient in irreversible shock, the procedure can be performed speedily and without significant untoward effects. Although detail does not measure up to the quality seen with retrograde catheter arteriography, the roentgenograms suffice for assessment of this type of lesion. ◀

Art, Hobby Show Planned For ISMA Indianapolis Meeting

Space will be provided at the 1967 annual meeting of the Indiana State Medical Association, Oct. 9-12 at Indianapolis for a Physicians Art and Hobby Show.

Members of ISMA interested in exhibiting pieces and requiring any information regarding this can contact any one of the following:

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303 S. Main St.
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51 S. Eighth Street
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It will be the responsibility of each physician to see that his work gets to the exhibition at the Murat Temple. Final arrangements will be taken care of by Drs. Schneider and Burnikel, co-chairmen.

The ISMA will provide suitable display facilities, but each physician is responsible for transportation costs and any other such expense involved in entering his exhibit.

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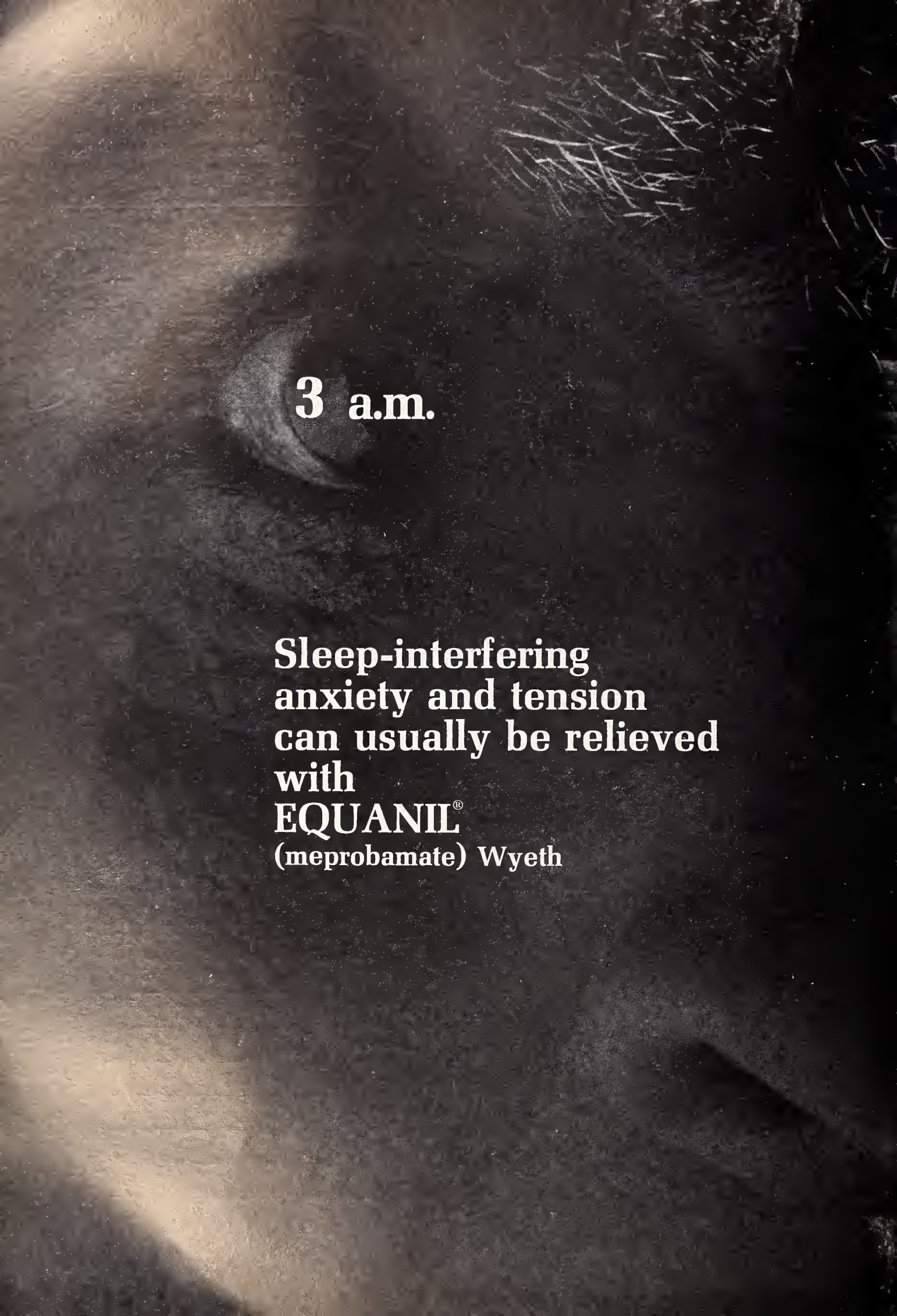
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FRACTURES AND ORTHOPEDIC PROBLEMS

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Calcification of Cervical Intervertebral Discs in Children

GEORGE F. RAPP, M.D.*
G. PAUL DE ROSA, M.D.†
Indianapolis

SYMPTOMS of painful neck and limitation of motion together with low grade fever in children frequently present a diagnostic problem. On occasions when cervical roentgenograms are made, a calcification of one or more intervertebral discs is noted. The significance of this finding is often questioned. The purpose of this article is to describe a clinical syndrome associated with calcification of cervical intervertebral discs, present a case report and briefly review the literature.

Case Report

A ten-year-old Negro female was first seen as an outpatient at St. Vincent's Hospital on December 31, 1966, complaining of a gradual onset of neck pain and tilting of her head to the left. The symptoms were first noticed on December 29, and had become so severe that she was unable to sleep the night prior to examination. History revealed no recent illness and especially no upper respiratory tract infection. An incidental note was made of a fall on the school ground on December 22, following which, however, the child had no pain or symptoms of injury.

The patient's general health had been good. Her mother had been hospitalized eight years previously for pulmonary tuberculosis at Sunnyside Sanitorium. She had been treated with anti-tuberculosis drugs and had been followed yearly, with no sign of reactivation. The patient's yearly tuberculin skin test had always been negative.



FIGURE 1
DIFFUSE calcification is evident in the disc space between the seventh cervical and first dorsal vertebrae.

The only positive findings were a left torticollis with pain and muscle spasm upon passive motion.

Roentgenograms of the cervical spine (Figure I) revealed diffuse calcification in the disc space between the seventh cervical and first dorsal vertebrae. No bone changes were evident.

Laboratory examination revealed: hemoglobin, 12.6 grams; white blood count, 4,800; calcium, 12.2 mgm%; phosphorus, 5.7 mgm%, and alkaline phosphatase 12.9 B. units. These findings are considered normal for a child.

The patient was fitted with a felt cervical collar and placed on analgesics and bedrest. On January 3, 1967 her symptoms had completely resolved. Follow-up roentgenograms on March 4, 1967 showed no calcium deposits.

* Hume Mansur Bldg., #508, Indianapolis 46204.

† Resident, St. Vincent's Hospital, Indianapolis 46207.

Discussion

The literature,[1-16] including the above case, reveals 45 cases of cervical intervertebral disc calcification. In 41 of these cases the symptom complex of (1) local or referred pain in the cervical area, (2) limitation of neck motion, and (3) torticollis or stiff neck was evident. In the remaining four reported cases, the authors felt the calcification was an incidental finding. It should be mentioned that several of the children had co-existing signs of upper respiratory infection or cervical adenopathy.

Follow-up x-rays (range one month to 11 years after symptoms) revealed that 34 of the 45 lesions showed regression of the calcification.

The calcification may occur in the nucleus pulposus, the annulus or in the cartilagenous plates. In 1951, Sandstrom[12] reported that annular calcifications tend to be permanent as opposed to nuclear calcifications which he observed to be reversible. He further stated that calcification in adults is usually of the permanent type and may involve only the annulus or the entire disc. This is thought to be a degenerative process with the exception of that calcification seen in patients with alkaptonuric ochronosis. The usual site of calcification in children is the nucleus pulposus.

The cause of intervertebral disc calcification in children is not agreed upon. Baron, in 1924, described the first case of intervertebral disc calcification in children. His case was associated with fever, leucocytosis and an elevated erythrocyte sedimentation rate. For this reason he implied it was an infectious process. Asadi[1] and Schorr and Adler[13] feel that trauma with resultant hemorrhage sets the stage for organization of the clot with subsequent calcification. It has been shown that the disc has an ample blood supply in children. This blood supply gradually diminishes until it is nonexistent in the third decade of life. For this reason hematogenous spread of infection to the disc space in children is a tenable point of view, but likewise, so is trauma with hemorrhage.

Lindberg[3] in a classic review of this subject has demonstrated a remarkable incidence of congenital anomalies in children displaying this symptom complex. He further proposes that a more suitable etiology for disc calcification in children is that the calcification of the nucleus pulposus is a manifestation of a congenital anomaly of the intervertebral disc. The association of calcified discs in animals of chondrodystrophoid races (i.e., dachshund and Pekinese) was presented to support this theory of congenital anomaly.

In previous reviews of calcified discs in children, those presenting in the thoracolumbar area are reviewed with those in the cervical area. We feel that cervical calcification should be reviewed and classified as a separate syndrome. Forty-one of the 45 cases reviewed presented with symptoms easily recognized as a clinical symptom complex. In contradistinction, those patients having thoracolumbar calcification were asymptomatic in over one-half of the cases. The symptomatic patients presented with markedly varied symptoms that were not alignable into any pattern.

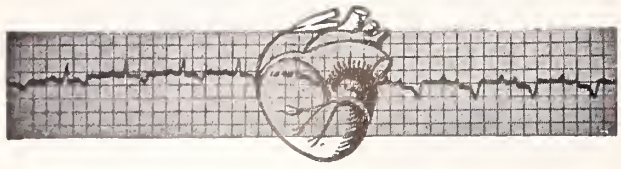
Summary

The literature on cervical intervertebral disc calcifications has been reviewed. One more case is presented. A symptom complex together with the roentgen findings of cervical disc calcification is recognized as a clinical syndrome and the theories of etiology are presented.

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Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Pulmonary Emphysema

CHARLES FISCH, M.D.
Indianapolis

PULMONARY emphysema with or without secondary heart involvement (cor pulmonale) presents a characteristic electrocardiographic pattern. This is due in large measure to: (1) descent of the diaphragm with resultant right axis deviation along the A-P axis and simultaneous clockwise rotation along the longitudinal axis and (2) increased lung space which alters the lines of flow of current and reduces the amplitude of voltage registered from the surface of the body.

The ECG of emphysema is characterized by: (1) prominent P waves in II, III and AVF, (2) prominent T-a waves in leads II, III and AVF, (3) right axis deviation of the P waves and of the QRS, (4) clockwise rotation and (5) low voltage of the QRS (R in V-6 $<$ 7 mm).

The conventional patterns of right ventricular hypertrophy, namely rSr, rsR, $R_{V-1}/S_{V-1} > 1$, rR, R and qR are seen in less than 20% of all patients with emphysema. This is thought to be due to the fact that right ventricular hypertrophy does not attain the proportions seen in congenital heart lesions or with long-standing severe pulmonary hypertension.

Figure 1 is characteristic of emphysema. The P waves are prominent in II, III and AVF. The axis of the P wave is +90°. The depression of the junction of the ST segments is due to prominent T-a waves. The mean QRS vector is directed posteriorly, giving rise to S-1, S-2 and S-3 patterns in limb leads (frontal plane). There is a marked clockwise rotation in the precordial leads and the voltage in V-6 does not exceed 7 mm. The absence of an R wave in V-1, V-2 and V-3 could easily be confused with an antero-septal myocardial infarction. It is important to recognize that the ECG of emphysema may at times be identical with that seen in myocardial infarction, a subject which will be discussed in subsequent communications.

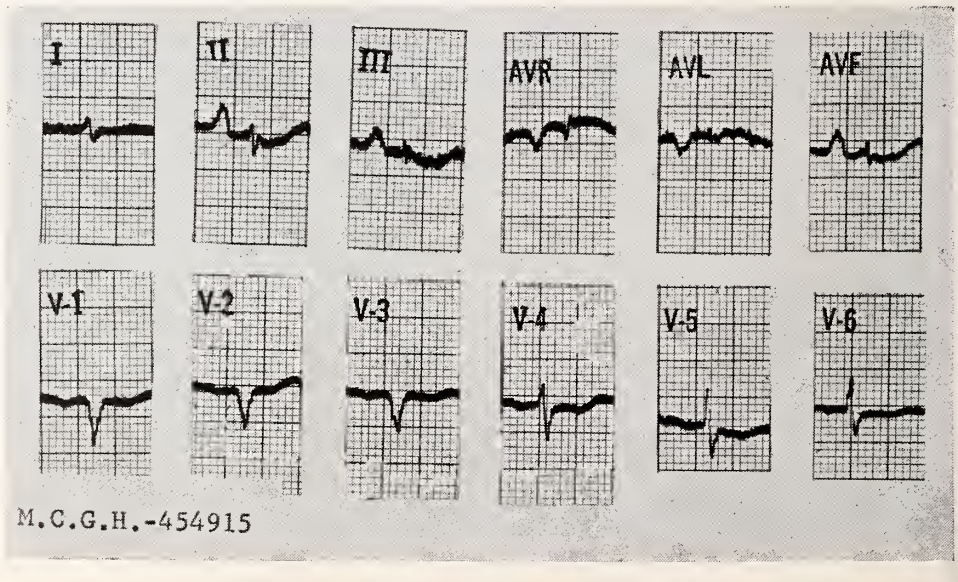
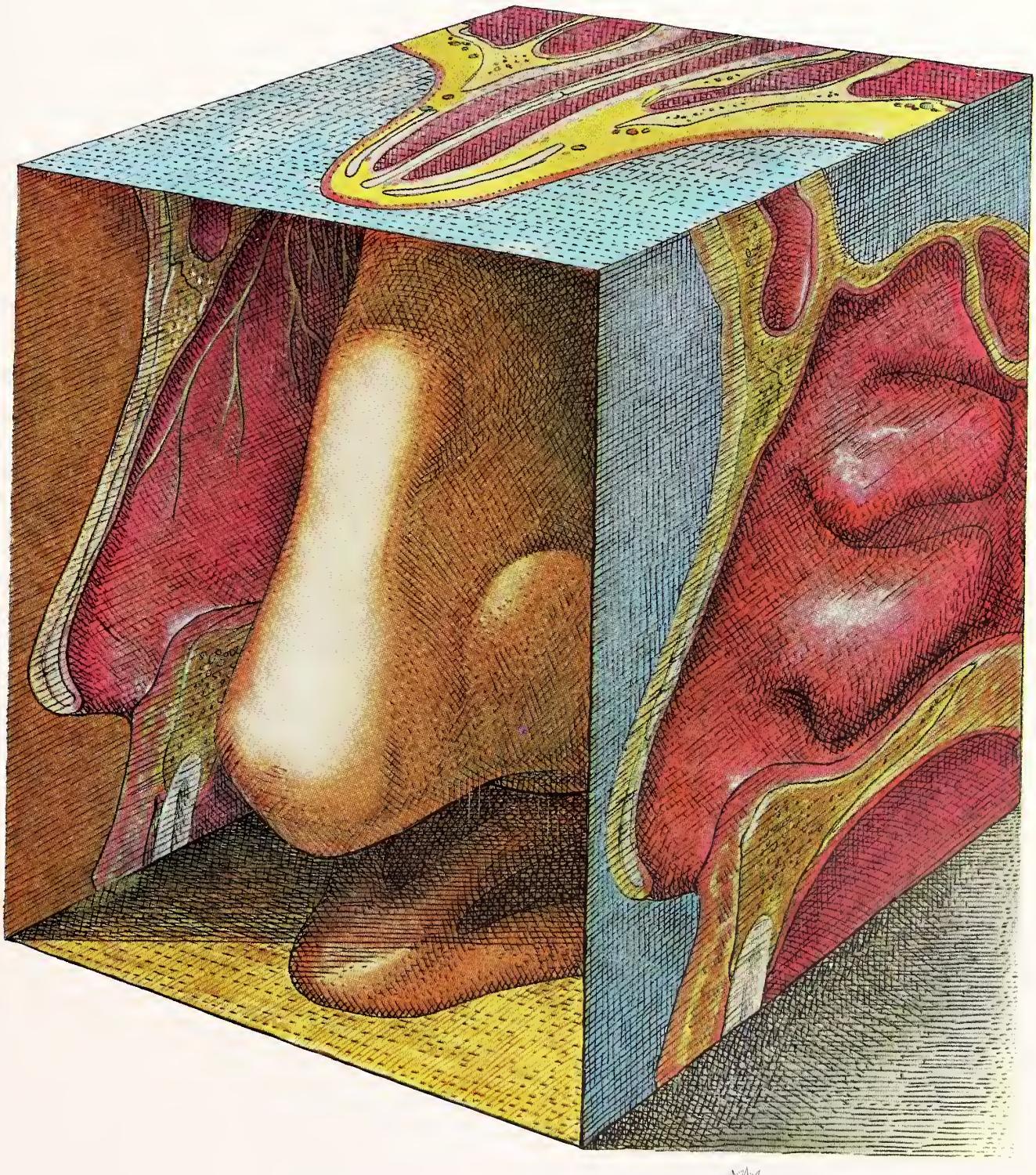


FIGURE 1
THE characteristic pattern of pulmonary emphysema is evident in this tracing.

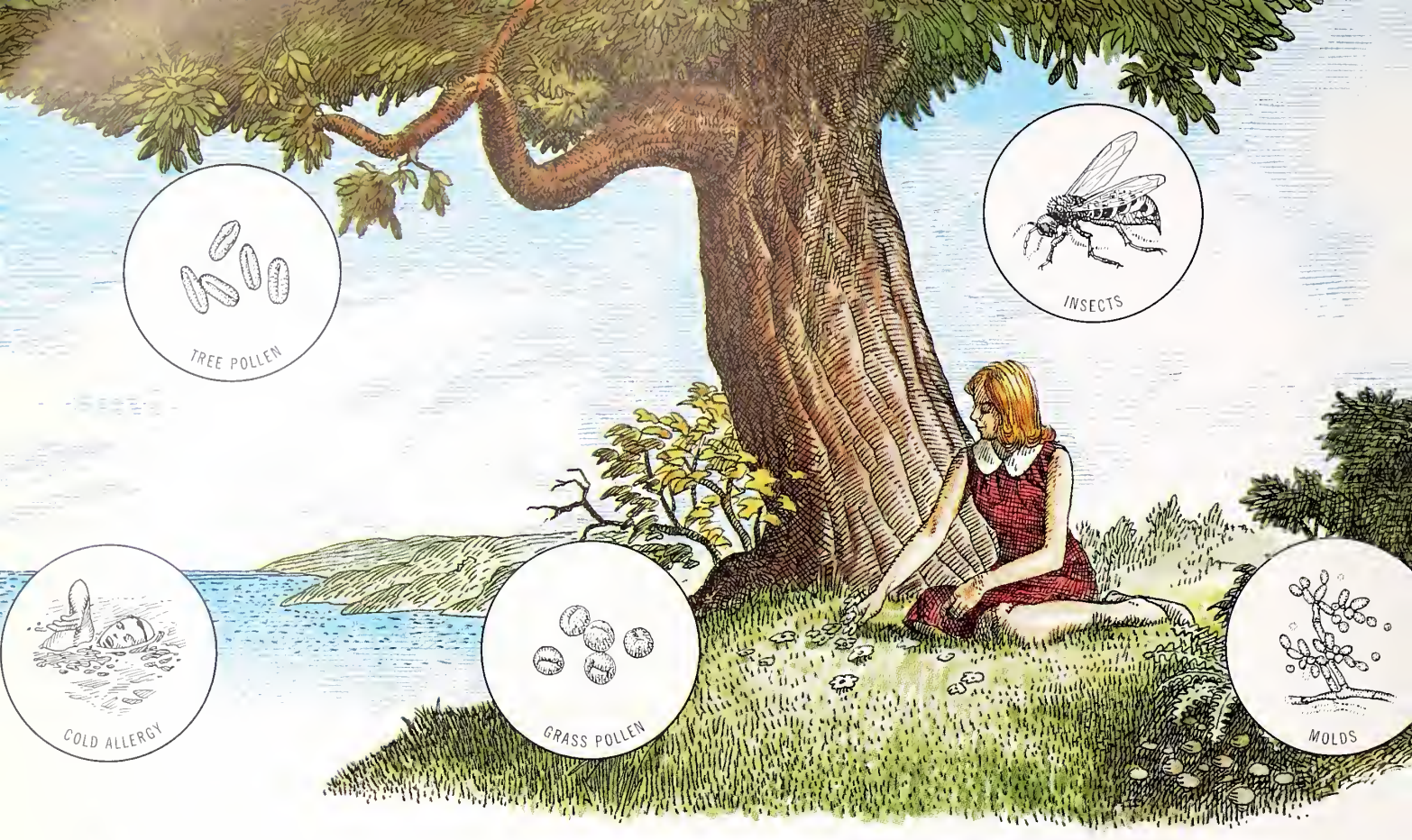
spring 1967

DORSEY Season

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this issue: the ubiquitous world of summer allergies



the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

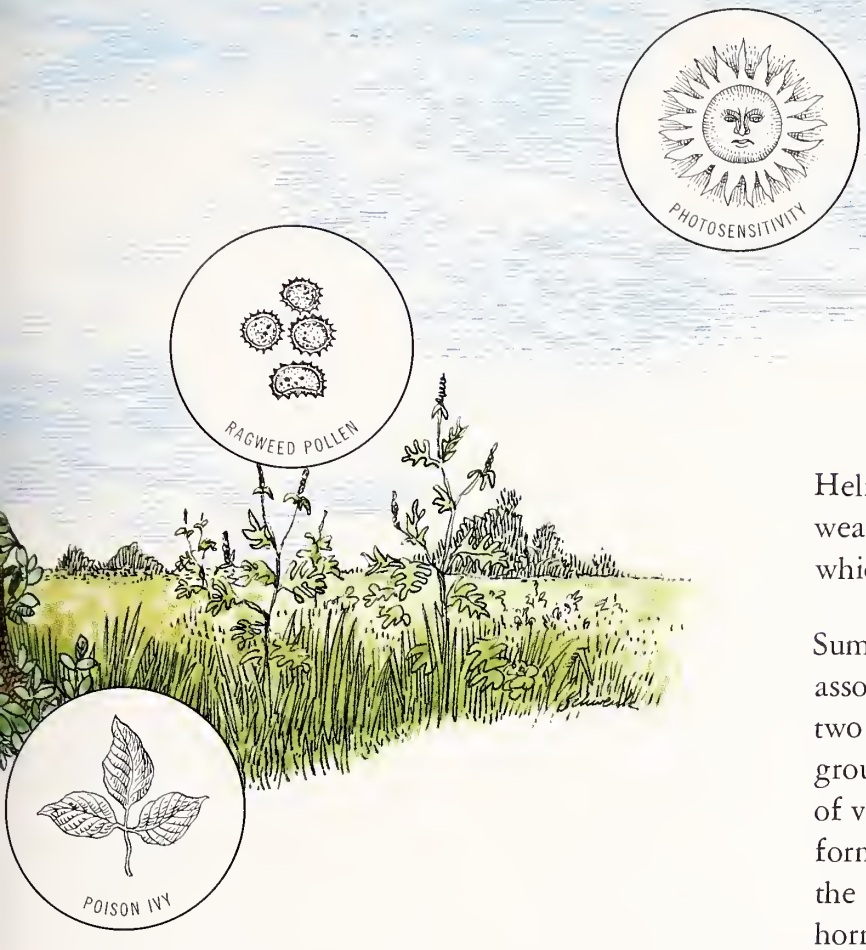
In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.[1] The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.[2] The entire tree season starts about April 1 and ends about Memorial Day, although all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.[3] Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.[4]

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is Alternaria—the kingpin of the molds—that meets a sudden demise with the first frost. Alternaria-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, Alternaria counts are at their highest, perhaps associated with the burning of leaves. Other molds such as Hormodendrum and Helminthosporium are associated with the warmer weather, as opposed to Penicillium and Aspergillus which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.[5] Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.[6] Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

Another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.[7] Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.[8] It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

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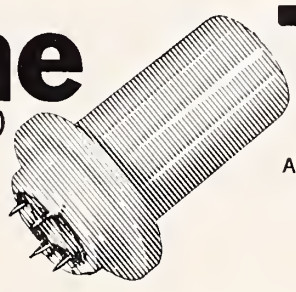
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The Cancer You View

Edited by
Edwin E. Pontius, M.D.
Indianapolis*

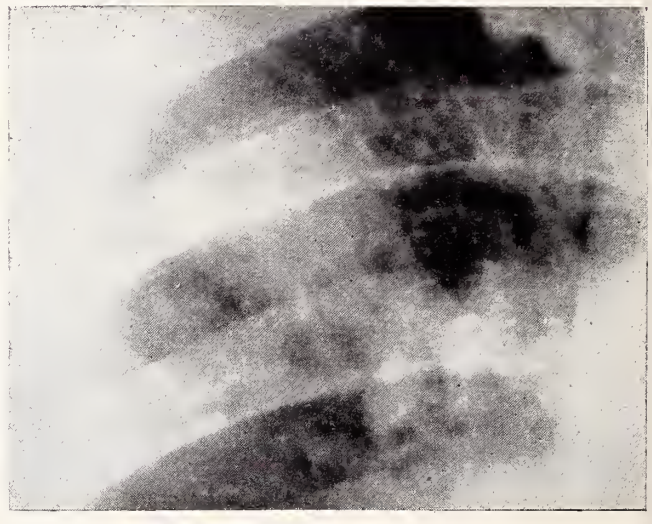
A 52-year-old woman had a roentgenogram of the chest as part of a pre-employment physical examination. A 4 cm. ovoid density was noted in the peripheral lung field, away from the hilar area. The patient stated that she had had an x-ray of her chest 18 months previously, which was reported to her as negative.

What is your diagnosis?

What would you recommend in the way of diagnostic procedures?

Would you feel that surgical intervention could be postponed for periodic follow-up x-ray examinations over the next six months?

For diagnosis and discussion, please see page 613.



* From the Pathology Section, Methodist Hospital of Indiana, Inc., Indianapolis 46207.

Supported by the academic activities and financial assistance of the Methodist Hospital Graduate Medical Center and the American Cancer Society, Indiana Division, Inc.

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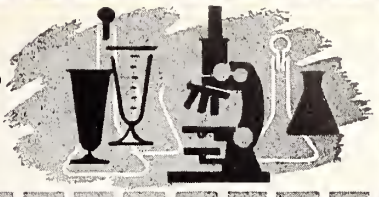
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This series is intended to emphasize the importance of judicious selection and proper interpretation of newer laboratory procedures as applied to differential diagnosis of various diseases. It is edited by Leon L. Blum, M.D., Terre Haute.

*Indications For Blood Transfusions**

THE indications for blood transfusions have undergone many changes through the years. At first, blood transfusion was a formidable procedure and was used only when life hung in the balance. Later, during the post-World War II period, the indications for blood transfusion were expanded to include a wide range of disorders, and frequently blood was even given as a "tonic." However, as knowledge of the various blood group factors increased and the real risks associated with blood transfusion were recognized, the pendulum swung in the opposite direction. Today, blood is being given only for very specific reasons.

The replacement of a sudden loss of blood is the most obvious indication for a blood transfusion, and the extent of blood loss will determine the management of such cases. Transfusions of whole blood, plasma, dextran or other volume expanders are often necessary to treat or prevent shock. In a life or death situation it may be necessary to administer low titer group O Rh negative blood without prior crossmatching. In most cases, however, the laboratory can provide properly cross-matched blood in a relatively short time. When the physician is faced with the necessity of using inadequately cross-matched blood in extreme emergencies, he must carefully weigh the inherent risks against the possible benefits. An estimate of the blood loss can be used as a guide for replacement but it should be understood that it is not necessary to replace every drop of lost blood. Furthermore, the physician must always be alert to the danger of pulmonary edema and circulatory overload caused when too much blood is administered too quickly. However, if shock persists it may be necessary to risk pulmonary edema in order to treat the circulatory collapse.

One of the most difficult decisions which the physician faces involves the treatment of chronic anemia. The temptation to administer blood to these patients as the primary method of therapy is great, particularly when hemoglobin levels of 4 or 5 grams per 100 ml. are observed. It is important to remember that these patients have usually had an opportunity to adjust to their chronic anemia, and frequently they are in no distress. The first thing the physician should do is to initiate a diagnostic program designed to determine the etiology of the anemia. If the anemia is found to be related to a deficiency of iron, folic acid or Vitamin B_{12} the anemia will usually respond to supplementation of the deficient factor, and the patient may replenish his hemoglobin without the necessity of blood transfusion. However, if these patients show signs of cardiac failure or air hunger it may become necessary to resort to transfusion. In such cases it is wise to use packed red cells in order to avoid cardiac overload, and the blood should be administered slowly taking three to four hours to administer one unit of blood. While the patient with uncomplicated chronic anemia usually does not require transfusion when the hemoglobin is in the range of 8 grams per 100 ml., the occurrence of a complicating illness or sudden drop in hemoglobin due to bleeding or intravascular hemolysis or sudden bone marrow depression may require the administration of blood. On the other hand the cardiac or pre-surgical patient may require transfusion if the hemoglobin level is under 10 grams per 100 ml.

The use of transfusion in hemolytic anemia requires careful consideration of the clinical status of the patient. The physician should never expect to maintain a normal hemoglobin level in patients with sickle cell disease, Mediterranean anemia and the anemias related to other hemoglobinopathies. Here, it is best to withhold transfusions until a hemolytic crisis occurs. The over-zealous use of blood can only hasten the day when the patient has been sensitized to so many blood group factors that it becomes almost an impossibility to find a compatible blood for transfusion. Patients who have an acquired type of hemolytic anemia

* Prepared by the Section on Practice of Pathology in the Private Office, College of American Pathologists.

are often difficult to cross-match from the very beginning because of the underlying immunological disorder that is present. In these cases, the danger of a hemolytic reaction is increased if the patient is transfused.

The hemolytic anemia of *erythroblastosis fetalis* is a specialized problem and the physician must be prepared to perform an exchange transtransfusion whenever certain danger signals appear. The major indications for exchange transfusion in infants with erythroblastosis include:

(1) *a cord bilirubin level of 4 mg per 100 ml. or higher;*
(2) *a rising serum bilirubin which can be expected to exceed the level of 20 mg per 100 ml.;*
(3) *severe anemia with marked reticulocytosis and impending cardiac failure.*

The last group of patients for consideration are those who are bleeding because of a deficiency of a factor required for blood coagulation. Patients with bleeding disorders should have a complete coagulation study to determine which blood factor is missing. If the deficiency is pinpointed, in many instances the physician can prescribe the proper replacement therapy for the correction of the hemorrhagic tendency. Coagulation factors V and VIII and blood platelets are very unstable in stored blood. Treatment of these deficiencies requires special care in drawing the blood for transfusion. The blood should be administered as soon as possible after being drawn and always within a period of 24 hours. Fresh frozen plasma is the ideal agent for use in hemophilia (factor VIII deficiency). Patients with either platelet deficiency or fibrinogen deficiency usually require more of the deficient coagulation factor than can be given by ordinary whole blood transfusion because of the low concentration of these factors in the blood. It is often necessary to administer platelet concentrates for thrombocytopenia. Afibrinogenemia or hypofibrinogenemia are best managed by administering concentrated fibrinogen.

The patients who bleed after a massive hemorrhage and/or multiple transfusions may require fresh blood, as may the patient bleeding from severe hepatic disease. Transfusion of fresh blood in such situations can be life-saving.

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Good Year for AMPAC, I-HOPE

AMPAC and I-HOPE both had one of their best years in 1966. Both organizations have gotten that big psychological lift that comes from knowing that the job has been well done and that the results are right. They are now proceeding with plans for the next election and for many more elections in the future.

The bipartisan approach of the PAC organizations has resulted in the election of candidates, both Democrats and Republicans, who are in favor of the free and proper practice of medicine and constitutional government.

Dr. Frank Coleman, Chairman of AMPAC, in reporting to the AMA delegates in Las Vegas said "the 90th Congress will be composed — on both sides of the aisle — of enough men and women of moderate to conservative bent to constitute a majority. Medicine cannot only rejoice in that fact, but can feel . . . that its forces helped to bring it about."

AMPAC was active in 146 Congressional contests—131 for the House and 15 for the Senate—and was successful in more than 80%.

State PACS are credited with activity in an additional 130 or more Congressional campaigns, and in hundreds of campaigns for seats in state legislatures. The state PACS are rated by Dr. Coleman as strong and vigorous.

I-HOPE can be proud of its successful campaign. Many of those elected to the House of Representatives, especially in the case of the close elections, and outstandingly in the district in which the incumbent Congressman was defeated, have acknowledged their gratitude for I-HOPE support. More than a few winning candidates rate the support by I-HOPE and physicians as contributing the winning margin.

It is interesting to know that, nationally, not a single Congressman who voted against Medicare lost the election because of his courageous and conscience-dictated stand. All Congressmen who opposed Medicare on roll call votes were re-elected except three and each of the three lost the election obviously and admittedly on other issues.

"Never before in this country's history have physicians and their wives worked so hard to support the candidates they believed in," Dr. Coleman said.

Despite the joys of success, this is no time to celebrate, at least no more than momentarily. There is another election in 1968. AMPAC and I-HOPE and all the other state PACS are busy in preparation. Political action must be based on strength at the grass-roots. It is action at the local level that counts. Action at the local level is where physicians and their wives have been shining and it is where they will shine in 1968.

The Old Grouch Proposes

THE old grouch said that he could solve the shortage of general practitioners in the United States by next Tuesday evening if he had the opportunity. He furthermore promised that his solution will have the side-effect of increasing the general level of competence of all medical practice in this country. Doubting such unique perceptiveness, we asked him to document his thesis. As we understand it, it goes like this:

1. At the present time, approximately 75% of medical school graduates enter residency programs.
2. There are roughly 39,000 approved residency positions in the country, and only 22,000 of these are filled by U.S. graduates. Another 9,000 positions are filled by foreign graduates.
3. His solution, quite simply, would be to send letters by registered mail to hospitals

telling them that their residency program had been either discontinued or that their quota of residents had been roughly cut in half.

4. By this he would bring the total number of residency positions down to about 10,000-12,000.
5. This would mean that only about 25% of each graduating class could expect to obtain residency appointments, and the remaining 75% would enter general practice.

Basically, this was his idea. The old grouch wouldn't stop there, however, but continued to supply figures to support his case.

1. At the present time there are 39 separate pathology residencies approved in Ohio, for a total of 209 residents. In New York City alone, there are 50 programs approved for 321 positions.
2. New Jersey has 18 internal medicine residencies, with a total of 186 positions. Ohio has 28 approved internal medicine programs which can accommodate 487 residents.

This did seem to be a surfeit of openings, and we were forced to admit that all 487 positions might not be top-drawer in quality.

He reasoned that decreasing the number of programs would increase the quality of each individual program. Also, if a limited number of positions were available, each intern and student who harbored any intention of obtaining an appointment would re-double his effort to improve his performance during school and internship years.

The general level of medical competence would be raised for both the specialist and the general practitioner. Both groups would be achieving more in such a competitive atmosphere, so that future general practitioners would be even better prepared.

There are arguments against such a proposal, and even more to the point, such a proposal would bring down the wrath of many medical subgroups. We will present these next month in "Attacking the Old Grouch."—J.W.H.

Guest Editorials

The All-Important Art of Handling Patients

WALTER C. ALVAREZ, M.D.
Chicago

A while ago I was talking about medicine to a fine woman of culture, when she said, "You doctors can growl all you like at the chiropractors, but I am going to keep going to one of them. Why? Because you fellows don't talk to me. Often in ten minutes, you give me a prescription and push me out the door. My chiropractor is kind and courteous, and he sits and talks to me — which gives me a great deal of comfort and help."

Many a time I have thought of that woman and her statement. Also, then I will think of what happened to one of my best friends — one of the best-trained surgeons in California. Because he was technically so able, for years I referred patients to him, but eventually I quit, because so many of the people I sent him came back to ask me to get for them someone else. When I asked, "What went wrong?" they said that they had gotten into a heated argument with him; and had left him in anger. And this was so strange because with me — and I imagine with most of his fellow physicians — he was good-natured and affable. Also, he was a well-educated man, not only in medicine, but in art and music and literature, and he came of a fine family.

But with patients he was arrogant and dictatorial, and likely to get angry and sarcastic the moment a man or woman questioned anything he said. He had a strong feeling that no layman had a right to question anything a physician like him might say. I have known a number of other physicians who shared that feeling. Unfortunately, my friend could not learn the art of handling patients well, of getting along happily with them; of impressing them favorably, and of gaining their confidence, their trust, and perhaps even their affection. Because of this misfortune of his, he never could build a practice, and eventually he gave up and went to ranching!

I remember also a brilliant internist who never could get a practice because he never could learn to impress his patients favorably. He never fought with the people I sent him; he was a friendly man, and he was nice and kindly; but as the people said, he gave them the impression that he was a brilliant eccentric who perhaps knew the science of medicine, but would never get around to learning what was wrong with them, and what should be done to cure them.

From readers of my newspaper column, I get some 100,000 letters a year, and I have been much impressed with the fact that more and more often in recent years, writers complain bitterly that the doctors they have seen would not talk to them and explain their trouble. From the top of a huge pile of letters I now pick one, in which the person says, "My doctor told me that I have Felty's syndrome, but he would not tell me what it is. He just gave me a prescription, and said goodby." Here is another letter from someone who says, "My doctor told me I have a thrombocytopenic purpura, but he wouldn't stop to tell me what that is; if it is serious; how long will it last; will it kill me, or should I go right away to some big medical center in which research is being done on it? He just gave me a prescription, and his nurse ushered me out."

Many letters which distress me come from fine women who say something like this: "My son got some swellings on the side of his neck, so I took him to the doctor. He said, 'He has Hodgkin's disease; take him to

the x-ray man.' I begged the doctor to stop for a minute and tell me what Hodgkin's disease is; isn't it some form of cancer; if so, is there any hope for my son; is there any new treatment that will help him; how long is he likely to live; will there be much suffering; should I take him to some big clinic or university, where perhaps I can find a great expert on the disease?"

But in cases like this, the mother always goes on to say, "In spite of the fact that I was frantic with anxiety, the doctor dismissed me. When we went to the x-ray man and I asked *him* the questions, all he would say was, 'Get that information from your doctor.' Then I went to the public library, but the material I could find there was so technical I couldn't understand it. So *please*, Dr. Alvarez, *do* write and answer the questions for me: *do* have pity on a mother who is nearly out of her mind with anxiety." These letters so tug at my heart that no matter how busy I am, I always answer them.

When I talk to my good doctor friends about this sort of thing, they often say, "Yes, I know I ought to answer such questions, but I just haven't time to talk to those people; I'm so terribly busy." I know my friend is busy, but I never am satisfied with his answer if only because, for 13 years I worked alongside of one of the busiest physicians in all this land — Dr. William J. Mayo. He not only had his enormous surgical practice, but he had an enormous mail; he had an enormous job running the Mayo Clinic; he was a regent of the University of Minnesota; his advice on many problems was constantly being sought by eminent people, and he usually had a houseful of guests. And yet, many a time, as we walked through the clinic, a patient — perhaps an old farmer — would come up to him and say, "Dr. Will, you operated on my father and saved his life; now my daughter is here, and the doctor says she has lupus erythematosis. Please, Dr. Will, what is that; is it serious; can my girl get well; how long will she live; and what is the treatment?" The point I want to make is that never did I see Dr. Will refuse to answer such questions. Usually in 30 seconds he would give the farmer some idea of what lupus is, what can be done for it, and what man in the clinic should see the girl. If Dr. Will, with all his overwork, could do that sort of thing, why can't all of us do it?

One thing I do know, and this is that because of our often refusal to answer patients' questions, and especially to answer them in simple understandable English, we are getting a "bad press", and bad "public relations." No longer are people talking of us as they did of the kindly old family doctor of my father's type. And this distresses me.

I was just reading an article in *The Bulletin of Medical History*, in which the author told how the great Adolf Meyer — the Father of American psychiatry — said, about 1894, that one of the greatest needs in medicine — even then — was for physicians to talk in plain English, and not in an unintelligible jargon. Actually, even Hippocrates, 400 years before Christ, said that "He who would talk about the medical art must speak so that the layman can understand."

Surely, it is a very sad thing for a man to spend perhaps 13 years studying medicine, and then to find he cannot build a practice because he cannot learn to handle people, and to grip them to him with gratitude and respect and sometimes even a feeling of affection.

A Smelly Editorial

No wisecracks, please, about this editorial having a foul odor. It should. It's about skunks. Or polecats, if you prefer.

We have always known that the little animal, so adorable to look at, was a real stinker. But now comes a communique from the U. S. Public Health Service which goes much further in tarnishing the image of the skunk. The Health Service doesn't give a stinker's dam about the smell of the skunk but it has voiced grave concern about the bite.

It seems that the number of rabid skunks has reached "epidemic proportions" and has become a health problem of some consequence in the United States.

Research has indicated that skunks are not only far more susceptible to rabies than dogs, but they propagate the disease much more swiftly among themselves. The PHS had some figures to support its case—in 1965 there were 1,582 confirmed cases of rabies in skunks compared with only 412 rabid dogs.

There was at least one encouraging fact in the skunk report released by the Health Service. Alabama has a relatively low skunk population. Most certainly our skunks are just as refined, cultured, rabid and smelly as skunks elsewhere, we simply have fewer of them.

It was a mild surprise to learn that there were more skunks, and more rabid skunks, in Ohio than anywhere else in the nation. We would have guessed that the greatest concentration of skunks would have been in the District of Columbia.—**William F. Smith, M.D., Editor,** *Journal of the Medical Association of the State of Alabama,* **36:775, January, 1967. (Reprinted with permission.)**

Editorial Notes...

Most children can open the "safety closures" on medicine bottles as fast as adults and sometimes faster. A recent study by Dr. Alan K. Done of the University of Utah showed that a group of 36 children from 20 to 40 months in age could open and ingest the contents of three different types of packaging with varying facility. Ninety percent of the children opened an

ordinary bottle and ate most of the candy (50 pellets) within 30 minutes. Fifty-seven percent opened the bottle with a safety closure and ate almost half the candy pellets. When the candy was packaged in a "strip pack" such as REDIPAK, Wyeth Laboratories, 83% were able to open at least one unit, but they could ingest only an average of nine pellets in 30 minutes.

The Public Health Service is opening a Driving Research Laboratory at Providence, Rhode Island, to investigate driving behavior patterns and to establish standards for driver licensing and improvement. Two highly advanced driving simulators of different types will be used. Each simulator reproduces moving highway conditions and events and records and measures the driver's reaction with the usual automobile controls. Drivers of all ages, under various stresses and while influenced by drugs, will be tested.

The VA hospital at Fort Thomas, Kentucky, a division of the Cincinnati VA hospital, is to be converted into a 79-room, 206-bed nursing home. The building will be refurnished into a colorful home-like atmosphere. Patients will be selected who are elderly, have chronic illnesses, and who no longer require hospital treatment or daily services by physicians. The VA has observed that elderly patients who are encouraged to care for themselves and for each other are happier and often develop a cheerful disposition after having become withdrawn as a result of a dependent type of existence in a hospital environment.

Total hospital expense per patient-day in 628 community hospitals averaged $50.86 in January, 1967. This is an increase of $5.31 over a 12-month period. Payroll expenses account for about two-thirds of a hospital's operating cost. Payroll expense increase for the same 12 months was $3.53. The same report shows an increase of 80,000 full-time hospital personnel during the same period.

Separate billing for professional services in voluntary hospitals has become the practice pattern for two-thirds of American radiologists practicing in such institutions, according to the American College of Radiology. The practice extends all through the United States and is almost universal in some states. Experience shows that separate billing is being utilized successfully in all types of hospitals, from large teaching centers through small community institutions served on a part-time basis.

North American Aviation Corporation is developing a prototype of a complete, transportable pharmacy for the U. S. Army. As planned it will be in a collapsible shelter, similar to the Army's MUST hospital. It will be able to stock and store up to 500 pharmaceuticals, and have a water-purification unit, a refrigerator and a sink. It will be transportable by ground, water or air, and will be able to function in temperatures ranging from minus 65 to plus 120. ◄

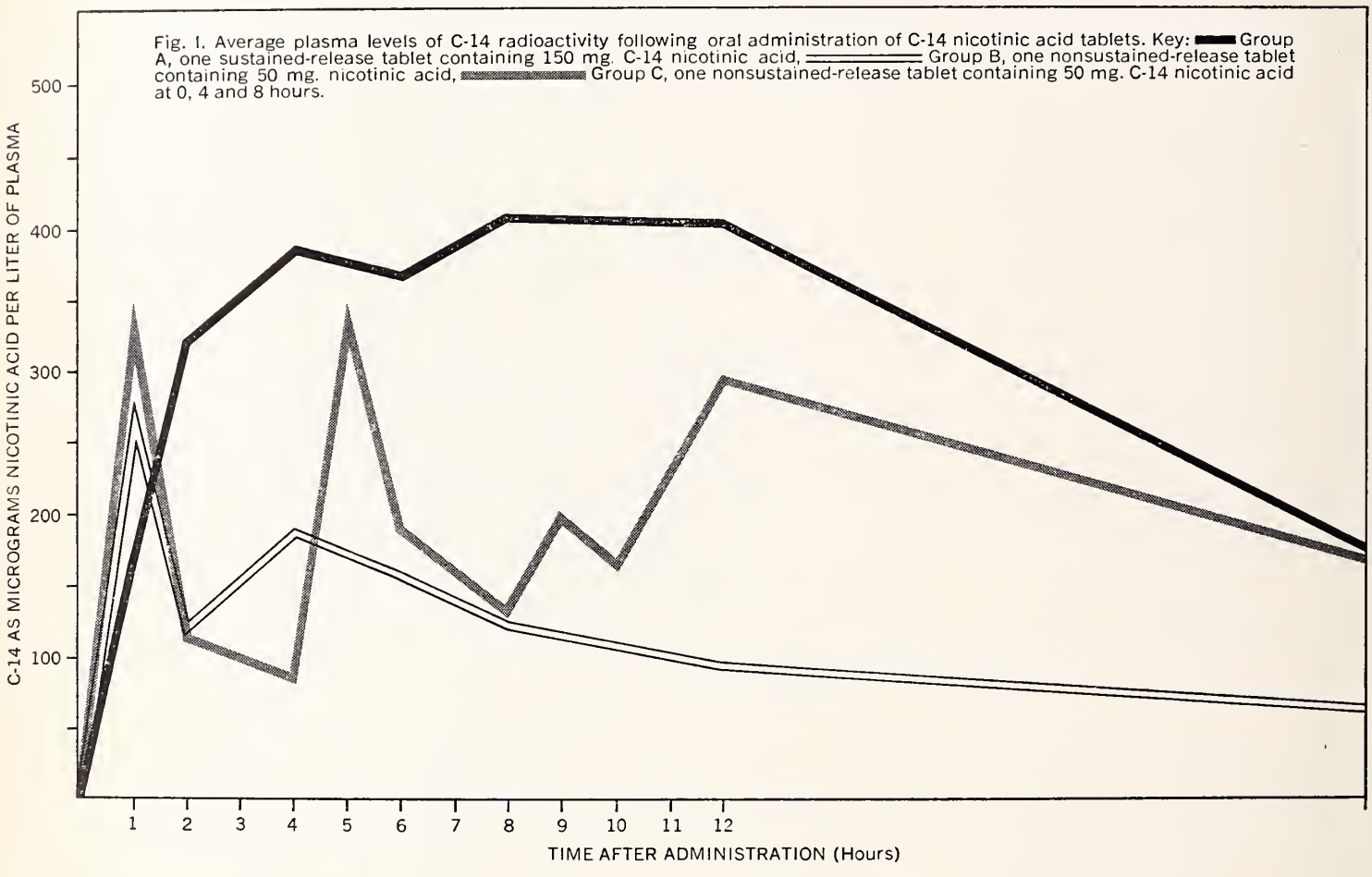
New Xerox Booklet Speeds Paperflow for Patient Care

Patients, paperwork and procedures are all vital to the smooth operation of hospitals, clinics and nursing homes.

A new Xerox booklet tells how to improve patient care, eliminate unnecessary paperwork and streamline procedures. Dozens of customer-tested techniques for speeding paperwork in applications from medical records to news releases are presented in detail.

For a free copy of "Patients and Paperwork" contact the nearest Xerox branch office or write Xerox Corporation, Box 24, Rochester, N. Y. 14603.

Sustained circulatory, respiratory and cerebral stimulation for the





(fewer absent doses by absent-minded patients)

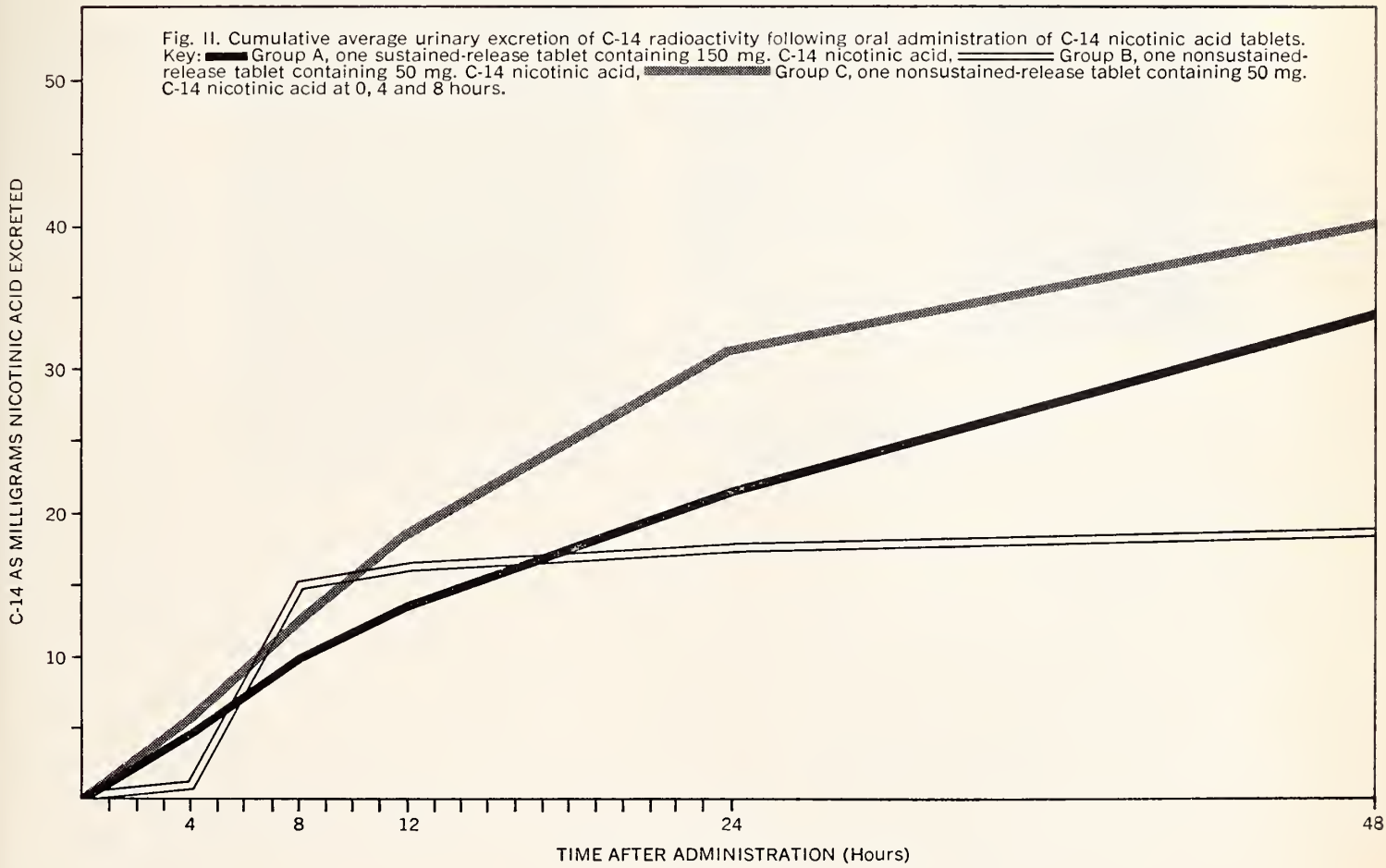
Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilatation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also, cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate, signs of senile confusion. Patients become more alert,

aged and debilitated



less confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

President's Page

Dear Doctor:

The ideas I am about to put forth are written not as policy of the Indiana State Medical Association, or any of its commissions or any of its committees. They are written to stimulate thought.



We have for all time abhorred third party interference in our dealings with patients. We have done this to preserve that sacred relationship between the doctor and the patient. For about 20 years we have taken payment from a third party, which organized medicine created—Blue Shield. We have taken third party payment from private insurance companies, and now, for the last several months, third party payment from government through Medicare. Thus, I feel, it is time to assess, realistically, the true nature of this interference. In my personal practice I find no difference in my relationship with my patients no matter who pays the bill. Perhaps my practice is unique. However, I would like for each of you to quietly, and without emotion, study this problem. Perhaps the old dogma is false.

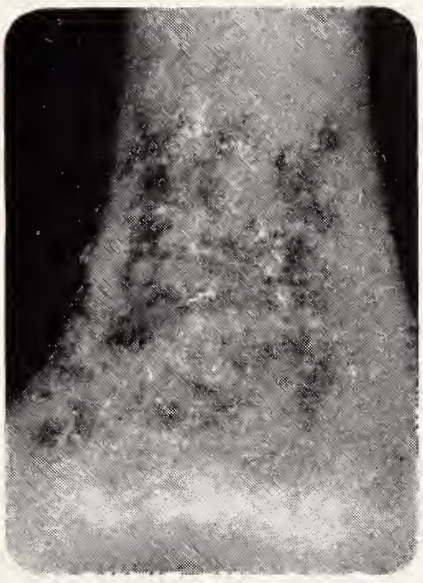
At the Blue Shield Seminar I heard a union head state that he wanted full coverage for his union members. He stated he had no quarrel with the medical profession, and that he respected the American doctor's intelligence. A gentleman from management stated that he felt that this type of coverage would occur. Both were willing to have this purchased through private enterprise insurance and did not want government medicine. The union representative proposed that office calls could be handled by many of them being grouped together and thus eliminate most of the paperwork for such small payments as office visits. It is the handling of these small calls that most insurance companies object to when full coverage is mentioned.

All of this I believe is the hand writing on the wall. I believe that sooner or later, organized labor and other groups will demand and will get such coverage. The questions that now come to me are as follows: Where does organized medicine fit in the picture? Should organized medicine not be trying to figure out ways to make full coverage work and still make it palatable to the profession? Will organized medicine wait until labor requests and gets no help and then turns to government for this coverage? I would wager, unless you and I give this urgent and logical study, that the latter will happen. Organized medicine will then offer a plan through private insurance companies to give this coverage. It will be offered too late and will be much like Eldercare.

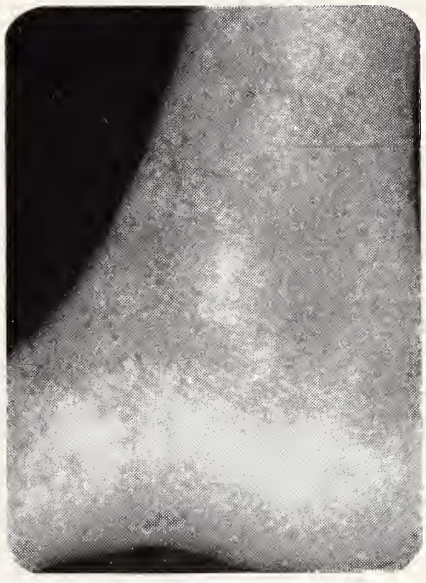
I realize full well that what I have written above is revolutionary. Perhaps it is unthinkable. Just before it was written so was Eldercare. I would urge that those who will assume the leadership in a few months think long and hard on this problem. I would ask that you give it unemotional, logical, constructive thought.

Eugene S. Nelson M.D.

Eczema of many years... controlled in two weeks



Before treatment



After treatment — with ARISTOCORT Topical Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

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Aristocort® Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide

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406-G

The Woman's Auxiliary

REPORTS TO ISMA

For those of you who take time from your busy professional life to read this page, you will realize that another auxiliary year has gone by.

While there will be some changes in the officers and chairmen this next year, (we feel that new personalities and fresh ideas are healthy) we also have retained some of the experienced leadership, to add continuity to our program.



The objectives of our auxiliary remain the same from year to year.

1. To assist the ISMA in its program for the advancement of medicine and public health.
2. To cultivate friendly relations and promote mutual understanding among physicians' families.

As you can see from these objectives, our organization could not exist without "YOU."

While it is too early to give statistics on last year's achievements, we can be assured that under the able leadership of Mrs. Alfred Scales, the results will be impressive.

This past year, while serving as president-elect of the auxiliary, I had many opportunities for learning. The AMA convention, fall conference and the north central workshop, (all of which convened in Chicago) were most inspiring programs. Participating in our own state meetings and having the opportunity of visiting several county auxiliaries brought the added satisfaction of forming new friendships.

My responsibility as president-elect was to contact doctors' wives who live in counties where there are no organized auxiliaries. These ladies were given the opportunity to join the state and national auxiliary as M.A.L.'s (members-at-large). Seventy-four ladies accepted the invitation and became members. We hope that they will maintain their interest in the auxiliary through attendance at our state meetings and workshop.

The new year promises to be filled with many challenges. It is gratifying to know that we have the continued interest and support of the ISMA.

Roberta P. Deever



She simply sits while the party goes on around her, already used to being the girl who is left out. She tries to lose weight—but her emotions won't let her. She becomes irritable and depressed when she doesn't eat, and anxious when she considers her future. So each time she gives up.

"What can I do?" she asks when she visits your office. "How can I ever stay on a diet and lose weight?"

A PARTICULAR COMBINATION OF ACTIONS

Ambar #2 Extentabs®

methamphetamine hydrochloride 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

FOR THE NEEDS OF THE DIETING WOMAN

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Ambar is formulated to specifically meet both the physical and emotional needs of the woman who is trying to lose weight. *Methamphetamine hydrochloride* has a powerful suppressant effect on the appetite and also provides a gentle psychic lift to improve mood and encourage activity. The *phenobarbital* component, through its classic calming action, helps control irritability and anxiety, and helps counteract excessive CNS stimulation.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY / *Indications:* Ambar suppresses appetite and helps offset emotional reactions to dieting. *Side Effects:* Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. *Precautions:* Administer with caution in the presence of cardiovascular disease or hypertension. *Contraindications:* Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. See package insert for further details.

ISMA Annual Reception for Indiana Delegation in Congress



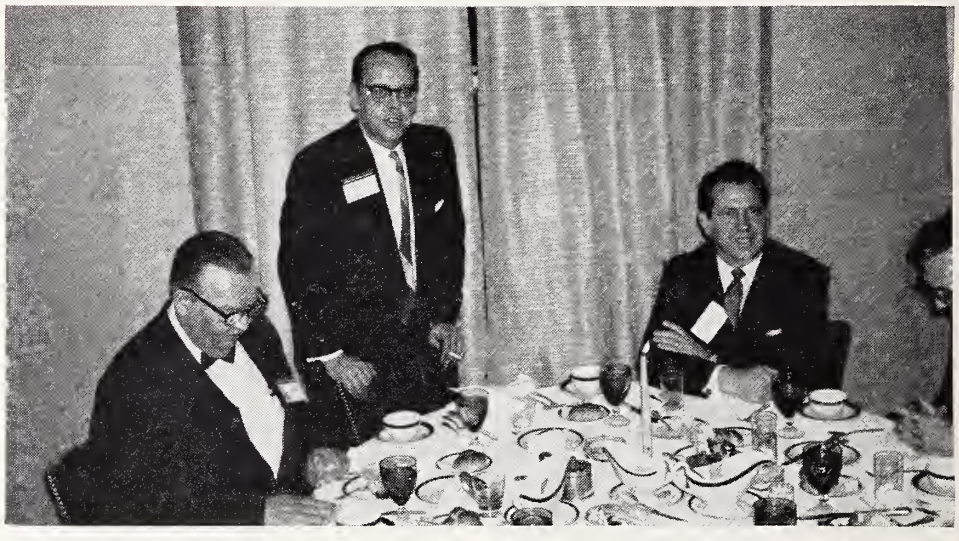
BEN COLE, Washington correspondent for The Indianapolis Star, and Dr. Dwight W. Schuster discuss matters with Representative Halleck.

THE annual reception for the Indiana delegation in Congress and their chief administrative assistants was held April 11 in the East Lounge of the National Press Club, Washington, D. C.

The annual event culminated two days of personal visitation by members of the Executive Committee and the co-chairmen of the ISMA Commission on Legislation. They discussed with the Indiana delegation legislation affecting medicine and also answered questions on various issues, including operation of the Medicare program.

The staff of the Washington office of the American Medical Association briefed the delegates on matters pending before Congress and the committees of Congress and also on the legislative program of the AMA. The AMA requested ISMA representatives to discuss specific issues with Congressmen who were on the committees which would handle these issues.

The consensus was that it was one of the warmest receptions ever accorded an Indiana delegation. All of the Congressmen were present except Birch Bayh, who was in Indiana on a speaking engagement.



SEATED around the table at the annual reception for the Indiana delegation in Congress are: James A. Waggener, ISMA executive secretary; Eugene S. Rifner, M.D., ISMA president and Hon. Vance Hartke, Senior Indiana Senator.



DR. RALPH V. EVERLY talks over the issues confronting medicine with Hon. Charles A. Halleck, Second District Representative and Dr. Burton E. Kintner, member of the ISMA Executive Committee.



INDIANA attorney General John J. Dillon and Dr. Rifner chat at the reception.



"Livingston...vertigo is my doom!"
Cried Stanley in his doctor's room.





Said the doc, "For your ills
I've got just the pills."



Said Stan,
"Antivert, I presume."

Antivert® tablets/syrup Rx stops vertigo
(meclizine HCl, niacin)

Tablets: (meclizine HCl 12.5 mg. and niacin 50 mg.) Syrup: (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and niacin 25 mg.)

Most widely prescribed anti-vertigo agent[1] Complete to moderate relief of symptoms in 9 out of 10 patients[2]

Antivert, the leading anti-vertigo product,[1] combines meclizine HCl, an outstanding drug for treatment of vestibular dysfunction, with niacin, a drug of choice for prompt vasodilation. Prescribe Antivert for your patients with vertigo, Meniere's syndrome and allied disorders.

Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. RX only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2. Scal, J.C.: Eye Ear Nose & Throat Month. **38**:738 (Sept.) 1959.

Neobon®
geriatric ♀+♂ supplement

helps keep them 'on the go'

Each capsule contains:

(1) **Vitamins and Minerals**	
Vitamin A (acetate)	2000 U.S.P. units
Vitamin D (ergocalciferol, U.S.P.)	200 U.S.P. units
Vitamin B_1 (thiamine mononitrate, U.S.P.)	0.5 mg.
Vitamin B_2 (riboflavin, U.S.P.)	0.5 mg.
Vitamin B_6 (pyridoxine HCl, U.S.P.)	0.5 mg.
Niacinamide, U.S.P.	50 mg.
Calcium pantothenate, U.S.P.	5 mg.
Vitamin E (di-alpha tocopheryl acetate)	5 I.U.
Rutin	5 mg.
Cobalt (from cobalt sulfate)	0.033 mg.
Molybdenum (from sodium molybdate)	0.066 mg.
Copper (from copper sulfate)	0.33 mg.
Manganese (from manganese sulfate)	0.33 mg.
Magnesium (from magnesium sulfate)	2 mg.
Iodine (from potassium iodide)	0.05 mg.
Potassium (from potassium sulfate)	1.66 mg.
Zinc (from zinc sulfate)	0.4 mg.
(2) **Hematopoietic Factors**	
Iron (from ferrous sulfate)	3.40 mg.
Vitamin B_{12} (cobalamin concentrate, N.F., as Stablets®)	1 mcg.
Vitamin C (ascorbic acid, U.S.P.)	50 mg.
(3) **Digestive Enzyme**	
Pancreatic substance*	50 mg.
(4) **Gonadal Hormones**	
Methyltestosterone, N.F.	1.0 mg.
Ethinyl Estradiol, U.S.P.	0.006 mg.
(5) **Amino Acids**	
L-lysine (monohydrochloride)	50 mg.
L-Glutamic acid	30 mg.

*Enzymatically active defatted material obtained from 250 mg. of whole fresh pancreas.

For older adults who require it, daily supplementation with Neobon can help overcome decreases in endogenous gonadal hormone production, as well as deficiencies of iron, vitamins and other nutritional factors. In a single convenient capsule, Neobon provides vitamins, minerals, gonadal hormones, hematopoietic factors, digestive enzymes, and amino acids—all selected for adjunctive therapeutic value in the geriatric syndrome. For example, one of the gonadal hormones in Neobon is ethinyl estradiol. It is more slowly metabolized in the body than natural estrogens or their esters.

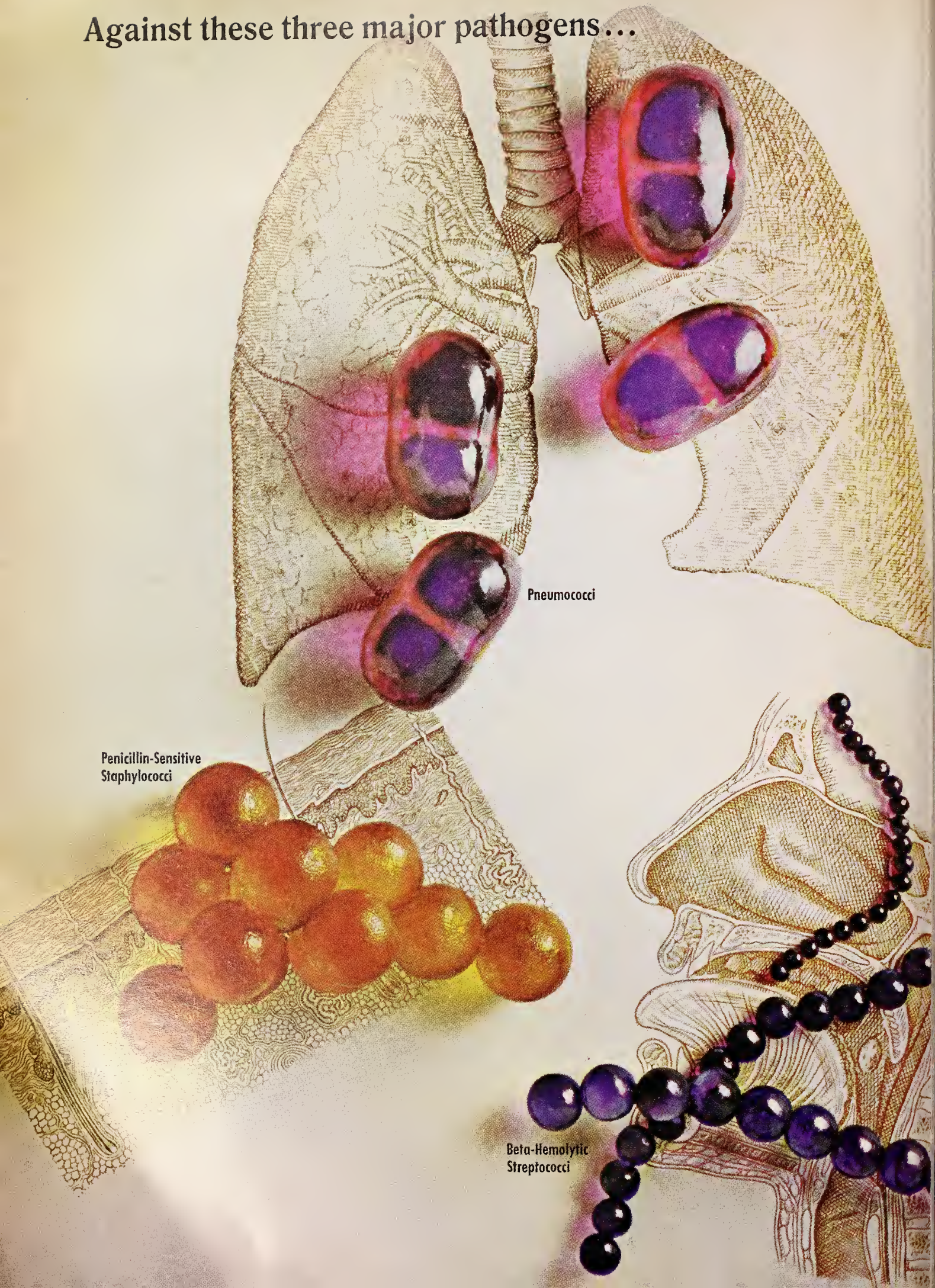
Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

Dosage: One capsule, t.i.d. with meals, or as directed by physician.

Supplied: Bottles of 60 capsules. Rx only.

J.B. ROERIG DIVISION
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Against these three major pathogens...



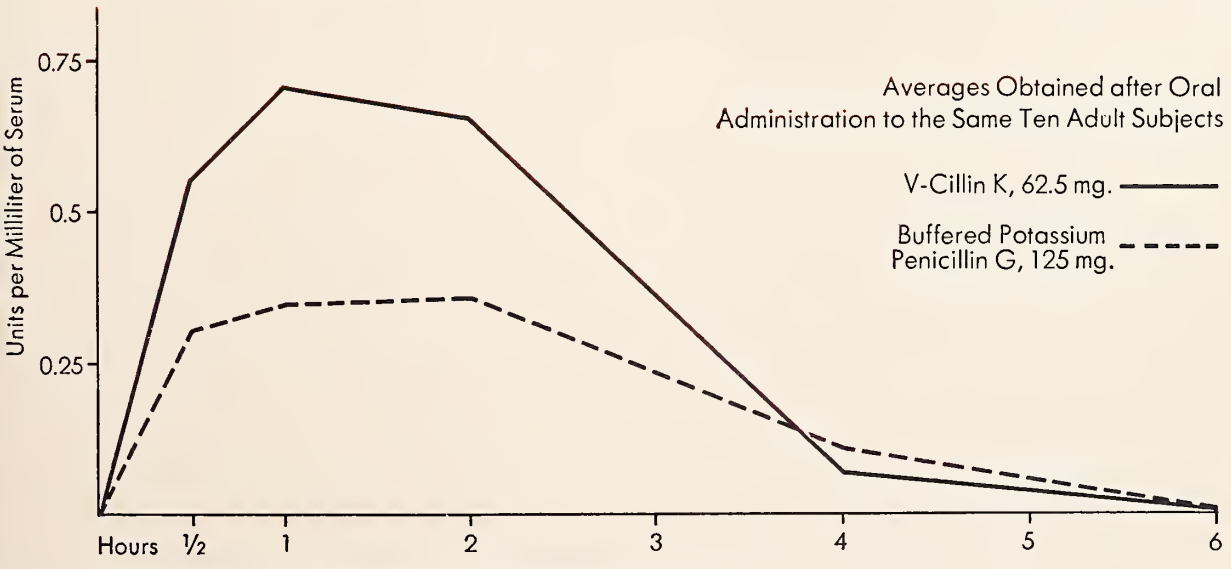
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

V-Cillin K® Lilly 700636

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,0000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [011867]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

700636

Blue Shield Operational Data: 1946-1966

(One of a series prepared by Blue Shield)

A review of the following table of Blue Shield operational data on an annual basis since 1946 shows the details of our growth and development through the years. In addition to the totals included in this table, during the last six months of 1966, Blue Shield processed 43,111 Medicare Part B claims totaling $1.814,933.

	Enrollment At Year End	Number of Claims	Payment For Doctor's Services	Operating Percent
1946	80,568	540	$ 32,021	30.9%
1947	141,293	5,780	421,479	16.4
1948	232,103	14,191	872,986	15.4
1949	364,550	27,068	1,430,854	14.0
1950	539,712	47,613	2,418,466	12.8
1951	729,897	78,752	3,791,691	13.7
1952	871,726	109,897	5,041,642	11.6
1953	989,344	144,016	6,064,876	12.3
1954	1,059,837	171,013	6,681,876	12.5
1955	1,267,994	209,510	7,945,040	11.1
1956	1,355,097	291,080	11,148,990	9.9
1957	1,396,368	368,470	13,753,780	9.7
1958	1,306,181	390,975	13,730,466	9.6
1959	1,363,882	427,149	14,477,628	9.8
1960	1,391,624	463,057	15,752,605	9.0
1961	1,431,251	514,991	17,957,496	8.3
1962	1,469,670	587,213	20,721,436	7.2
1963	1,491,827	662,710	23,319,855	6.8
1964	1,520,148	727,020	25,846,611	6.6
1965	1,554,470	764,683	26,939,647	6.2
1966	1,654,504	768,159	26,675,891	6.4

GRAND TOTALS

1946 through December, 1966

Total payments for doctors services since September, 1946		$244,982,298
Add outstanding		$ 7,749,736
Total claims expense through December 31, 1966		$252,732,034
Earned income	$287,886,913	
Reserve — December 31, 1966	$ 10,955,525	
Total claims paid for members since September, 1946		6,773,887

W. C. Huddlestone
Public Relations Division ◄

WANTED: Physicians Locations

GENERAL PRACTICE

Richard G. Lynch, 106 Swan St., Scotia, New York 12302

J. Franklin Swaim, 559th Medical Service Flight, 59th Advisory Team, APO San Francisco, Calif. 96363

SPECIALISTS

Felix Maroto, 27621 Chagrin Blvd., Cleveland, Ohio 44122—*Anesthesiology*

Francisco D. Gomez-Sanchez, 4856 Edgepark Dr., Cleveland, Ohio 44125—*Anesthesiology*

David S. Wiltsie, 4381-4 Washington Dr., Andrews AFB, Washington, D. C. 20331—*Internal Medicine*

Richard W. Carpenter, 10733 Interlake Ave., N., Seattle, Wash. 98133—*Internal Medicine*

Charles D. Albright, 1813 Diana St., Bossier City, La. 71010—*Internal Medicine*—available April, 1968

Morris A. Osborn, 4817 Baltimore Ave., Philadelphia, Pa. 19143—*Neurology*

Vaughn L. Fisher, Jr., 2133 Lyon St., San Francisco, Calif. 94115—*Orthopedics*

Richard M. Steidl, 444 Yosemite Ave., North, Minneapolis, Minn. 55422—*Pathology*

Raymond P. Lynch, 320 E. 138th St., Chicago, Ill. 60627—*Pediatrics*

Gloria H. Mortera, 600 S. 70th St., Lincoln, Neb. 68501—*Pediatrics*

James B. Webb, 211 Jefferson Square, Ottumwa, Iowa 52501—*Psychiatry*

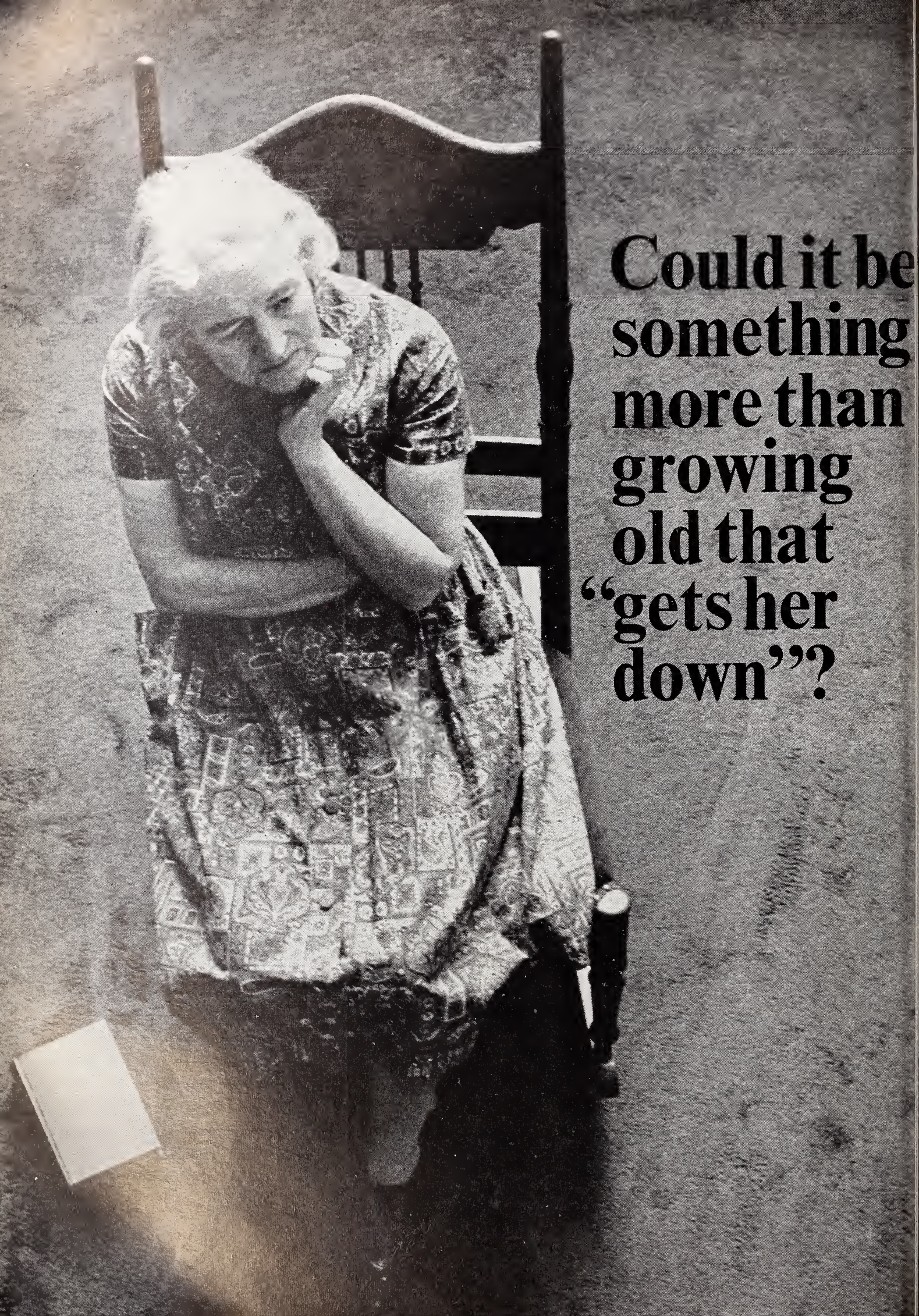
Manuel Azuara, 8154 Kenney, Detroit, Mich. 48234—*General Surgery*

Krishan G. Gulati, R. F. D. # 1, Under Hill Road, Yorktown Heights, New York 10598—*General Surgery*

Joseph L. Nosal, 29011 Prestwick Road, Sun City, Calif. 96089—*General Surgery*

Antonio Mortera, 600 S. 70th St., Lincoln, Neb. 68501—*Urology*

Shu-feng Cheng, Department of Urology, University Hospital, Iowa City, Iowa 52240—*Urology* ◄


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Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals ...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription

Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%, pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

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7-8378

Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

No False Imprisonment in Circumstances of Patient's Discharge from Hospital—An eight-year-old patient who remained in a hospital for a short time after her physician authorized her release, while her mother made arrangements for paying her bill, was not entitled to recover damages in a suit against the hospital for false imprisonment. The evidence failed to establish any of the elements of a cause of action for false imprisonment, an Ohio trial court ruled.

When the patient's mother came to take her home, the head nurse sent her to the office to get a dismissal slip. She discussed arrangements for paying the patient's bill with the hospital's credit manager. He gave her forms to be signed by her husband authorizing payment under an insurance policy as to which he was the insured, and had her sign a 30-day cognovit note as security. The credit manager then gave the patient's mother a dismissal slip. The patient then left the hospital, delayed only by car trouble. There was no unpleasantness in any of the mother's dealings with any of the hospital employees. There was no threat that the patient could not leave the hospital unless the bill was paid or security given for its payment.

In order for there to be a cause of action for false imprisonment, there must be a detention of the person and the detention must be unlawful. It is also necessary that the person detained knows of the detention or is harmed by it. There was no evidence of any detention of the person of the patient. Even if it could be said that there was a detention, there was no evidence showing that it was unlawful or unreasonable. Since credit is such an integral part of modern life, it cannot be said that it was unreasonable for the credit manager to discuss arrangements for payment of the patient's bill with her mother and to obtain security for its payment. Further, there was no evidence that the patient knew of any detention that might be said to have existed or was harmed by it in any way.

Bailie v. Miami Valley Hospital, 221 N.E.2d 217 (Ohio, Sept. 7, 1966).

Questions of Fact Raised in Suit Against Hospital for Death of Patient—In a wrongful death action against a hospital for damages for loss of support by the mother of an adult patient, whose death was allegedly caused by the negligence of the hospital's employees in diagnosing and treating the patient, a trial court erred in directing a verdict for the hospital, a Florida appellate court ruled.

The patient was brought to the hospital at 6:30 p.m. suffering from head pains. A resident examined the patient, took his blood pressure and made a urine test, but did not take a written medical history. He diagnosed the patient's condition as hypertension and gave him sedatives. On the basis of a discharge slip signed by a second resident who had neither seen nor treated the patient, the hospital, at 4:30 a.m. the next morning, called a relative of the patient and told him to pick up the patient. The nurse had difficulty waking the patient and had to dress him. The patient had to be carried from the hospital by two men. He died of a subdural hematoma at 3:30 p.m. while being returned to the hospital.

A neurosurgeon testified that the patient's hospital records were inadequate, but that there were sufficient symptoms to alert a physician that a serious problem existed. That testimony, combined with the circumstances of the patient's leaving the hospital, was sufficient to raise a question of fact as to whether the hospital employees exercised the degree of care toward the patient that his condition required.

There was evidence that the patient's mother maintained a home for him at least on a part-time basis, that she regularly received money from him when he was working, and that she maintained the home with those payments, a monthly check from the government for dependent children, and occasional contributions from another son. This evidence was sufficient to raise a question for the jury as to whether the mother was dependent on the patient for support at the time of his death. If she was dependent on him for support, she

had the necessary standing to bring the action.

Reeves v. North Broward Hospital District, 191 So.2d 307 (Fla., Oct. 5, 1966; rehearing denied, Nov. 17, 1966).

Issue of Fact Raised in Patient's Suit Against Hospital for Injuries Sustained in Fall—In a suit for damages against a hospital by a patient for injuries sustained when she fell from her bed, a trial court erred in directing a verdict for the hospital, the Court of Appeals of Kentucky ruled.

After the patient had been delivered of a child, she was returned to her room and left unattended. A little more than an hour later, she fell from her bed and sustained injuries which required surgery.

There was medical evidence that the medication and sedation that the patient had been given in connection with the childbirth could have produced sleep or unconsciousness for at least several hours after she had been returned to her room. There was evidence that although the siderails on the bed were up near the patient's head, they slanted down toward the bottom to where the patient could get out of bed. The patient testified that she was in such a condition that she did not know exactly what happened, but her testimony would support the inference that her injuries resulted from two different falls.

Considering all of the circumstances, there was sufficient evidence to justify a jury finding that the hospital employees did not exercise due care to protect the patient, despite expert testimony that they acted in accordance with the standards of good hospital practice, the court said. The judgment in favor of the hospital was reversed, and the case remanded for a new trial.

Vick v. Methodist Evangelical Hospital, Inc., 408 S.W.2d 428 (Ky., Sept. 23, 1966; as modified on denial of rehearing, Dec. 9, 1966).

Pretrial Interview of Patient's Attending Physician Authorized in Malpractice Suit—In a suit for damages by a patient against a physician for allegedly negligent treatment, a trial court did not err in authorizing the physician's attorney to interview, before the trial, one of the physicians who treated the patient for the condition as to which the negligence was alleged, a Michigan intermediate appellate court ruled. A statute provides for the waiver of the physician-patient privilege in malpractice suits as to any physician, called as a witness by the patient, who has treated him for the condition with reference to which malpractice is alleged. The taking of the deposition of such physician is also provided for by statute. The use of such deposition is restricted by the rules governing the admissibility of evidence. Until the contrary is shown, it must be presumed that the trial court will properly apply the rules of evidence when use is made, at the trial, of the deposition obtained during the interview with the patient's attending physician.

The trial court did not err in denying the patient's belated demand for a jury trial. The matter was one within the trial court's discretion, and there was nothing indicating any abuse of discretion.

Gailitis v. Bassett, 146 N.W.2d 708 (Mich., Dec. 8, 1966).

Physician's Negligent Diagnosis Held Cause of Patient's Death—Damages could be recovered in a suit against the government, under the Federal Tort Claims Act, for the death of a patient, where the evidence established that a Navy physician's negligent diagnosis of the patient's condition was the proximate cause of her death, the U.S. Court of Appeals for the Fourth Circuit ruled.

The patient, a diabetic, was brought to the hospital at 4:00 a.m., suffering from intense abdominal pain and continual vomiting which had suddenly begun an hour before. The physician questioned the patient about her symptoms, felt her abdomen, and listened to her bowel sounds with a stethoscope. The physician entered the diagnosis of gastroenteritis on the patient's chart, told her she had a "bug" in her stomach, and released her with instructions to return in eight hours. The examination took about ten minutes. The patient returned home and about noon, immediately after drinking a glass of water, she vomited and fell to the floor unconscious. She was taken to the hospital where she died a short time later. An autopsy disclosed that the patient had a high intestinal obstruction. The cause of death was a massive hemorrhagic infarction of the intestine caused by its strangulation.

It was undisputed that the symptoms of high obstruction and of gastroenteritis are quite similar. Gastroenteritis does not ordinarily require immediate radical treatment, but a high obstruction is almost always fatal unless promptly operated on. The physician himself, as well as medical experts for both sides, testified that an inquiry as to diarrhea and a rectal examination were accepted standard procedure in order to be able to rule out gastroenteritis and make a definite diagnosis of high intestinal obstruction. If he had followed those procedures, the physician would at least have been alerted to the fact that the case was one requiring close observation, with a view to surgical intervention if the graver diagnosis were confirmed. His failure to follow the procedures constituted negligence. That an intestinal obstruction is a rare occurrence and that gastroenteritis was the more likely of the two conditions did not excuse the physician's negligence.

The trial court had found that the physician was not negligent in his diagnosis. Its contrary conclusion did not violate the rule that a trial court's findings of fact are not to be disturbed unless clearly erroneous, the court said. That rule comes into

play primarily where conflicting testimony has to be reconciled. In such a case, the fact that the trial court had the opportunity of observing the witnesses is accorded great weight. In this case, the question was not one of conflicting evidence, but whether the undisputed facts established negligence. The determination from the facts of the presence or absence of negligence is a question of law. A trial court's conclusion on a question of law is freely reviewable on appeal.

The government's medical expert stated the opinion that the physician used "average judgment," but an analysis of his testimony, as a whole, supported the opposite conclusion. He stated that it was wrong not to ask about diarrhea and that an abdominal pain of one hour was not of sufficient duration for anyone to come up with a proper diagnosis. Further, his opinion was based on the assumption that the physician's diagnosis was only a tentative one. Uncontradicted evidence established that the diagnosis was not a tentative one. The physician himself testified that he considered and ruled out the possibility of an obstruction at the beginning of his examination. He entered gastroenteritis on the patient's chart without qualifying the entry in any way, and he released the patient from the hospital, thus allowing no opportunity for revision. He stated that he told the patient to return in eight hours because of the possibility that the gastroenteritis could complicate her diabetic condition. Therefore, the opinion of the government's medical witness was not entitled to the conclusory weight that the trial court apparently gave it, the court said.

The government further contended that, even if the physician was negligent, there was no proof that the negligence was the proximate cause of the patient's death, because it was merely speculative that even immediate surgery would have been successful. The government presented no evidence contradicting the expert testimony that the patient would have lived, if she had been operated on immediately. A wrongdoer, whose negligence has effectively terminated a person's chance of survival, cannot raise conjectures as to the extent of the chances that he has put beyond the possibility of realization. If there was any substantial possibility of survival and the physician destroyed it, the government was liable. It did not have to be shown to a certainty that the patient would have lived if she had been operated on promptly.

Hicks v. U.S., 368 F.2d 626 (C.A. 4, Oct. 27, 1966).

Orthopedists and Hospital Not Liable for Patient's Foot-Drop Following Surgery—Damages could not be recovered in a suit against a hospital and three orthopedists who practiced as a partnership by a patient who developed a foot-drop following an operation, the Louisiana Supreme Court ruled.

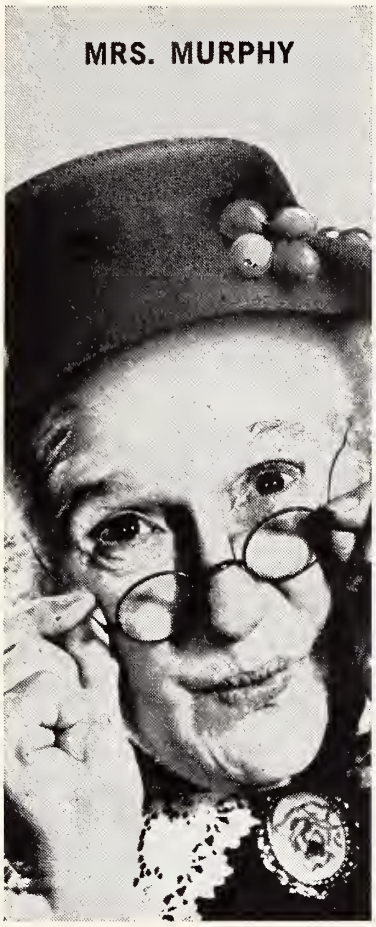
One of the orthopedists performed an osteotomy on the patient to correct her "back knee" condition. After the operation, he went on vacation, leaving the patient under the care of his associates. A few days after the operation, the patient developed a Staph. infection. The patient now has a permanent impairment of the deep branch of the peroneal nerve, which has resulted in a foot-drop.

An orthopedist, who testified as an expert for the patient, stated that the surgery had not caused the impairment of the peroneal nerve. He stated that the orthopedists possessed the competence necessary to undertake the operation and the postoperative care of the patient. He said that there was no evidence of any negligence on the part of the orthopedists or of hospital employees in the postoperative care of the patient. He stated that Staph. infections occur in 1½ — 2% of cases such as this even though all due care is exercised. Four other qualified medical experts testified to the same effect. There was no evidence which could sustain a finding of any negligence on the part of the orthopedists or the hospital.

There was nothing in the facts of the case to warrant the application of the doctrine of res ipsa loquitur, the court said.

Uter v. Bone and Joint Clinic, 192 So.2d 100 (La., Nov. 7, 1966; rehearing denied, Dec. 12, 1966). ◄







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Place The Athenaeum, Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Date July 18-20, 1967
Place French Lick Sheraton Hotel, French Lick

INDIANA HOSPITAL ASSOCIATION
Date Nov. 1-3, 1967
Place French Lick-Sheraton Hotel, French Lick

INDIANA STATE MEDICAL ASSOCIATION CONVENTION
Date October 9-12, 1967
Place Indianapolis

INDIANA STATE NURSES ASSOCIATION
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Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

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MONTHLY REPORT—March, 1967

Disease	Mar. 1967	Feb. 1967	Jan. 1967	Mar. 1966	Mar. 1965
Animal Bites	771	399	351	884	608
Chickenpox	584	456	442	871	681
Conjunctivitis	143	98	68	469	155
Diphtheria	0	1	0	0	1
Dysentery, Unspecified	83	117	70	52	155
Gonorrhea	495	723	336	492	299
Impetigo	98	73	90	150	130
Infectious Hepatitis	104	85	28	56	57
Infectious Mononucleosis	85	62	52	88	94
Influenza	2049	68	654	3885	5945
Measles (Rubeola-Rubella)	247	126	134	1591	755
Meningitis, Meningococcal	6	4	3	18	10
Meningitis, Other	9	9	2	3	11
Mumps	1134	702	431	671	413
Pertussis (whooping cough)	28	10	14	19	7
Pneumonia	510	329	237	669	756
Poliomyelitis	0	0	0	0	0
Streptococcal Infection	1538	953	596	2571	817
Syphilis					
Primary & Secondary	17	7	5	4	2
All Other Syphilis	105	68	60	105	94
Tinea Capitis	8	19	10	55	20
Tuberculosis (Active)	128	113	81	128	134



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*As shown by *in vitro* studies.
1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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The Cancer You View

DISCUSSION

A density found in the peripheral lung field is often termed a "coin" lesion because of its nearly circular shape and sharp peripheral definition. The lesion in Figure 1 is of relatively uniform density, without evidence of lamination or calcification. Its absence in the film 18 months previously indicates, of course, its recent origin. This set of findings requires immediate further diagnostic procedures.

Ordinarily, hospitalization is necessary for complete diagnostic study. Presurgical diagnostic methods would include skin testing for sensitivity to tuberculin or PPD and to histoplasmin and sputum smears and cultures for tubercle bacilli and fungi, especially *Histoplasma capsulatum*. The physician should not wait for the outcome of cultural studies. Though needed to help establish the etiology of a granuloma, these studies often require four to six weeks or longer.

Studies of sputum or bronchial secretions for malignant cells are useful since a positive finding will facilitate surgical care. Three to five separate cough specimens at different times may be needed. The peripheral location of the lesion decreases the probability of finding exfoliated malignant cells.

Tomograms, which more sharply focus on the lesion, may be a useful adjunct to the P. A. chest roentgenogram since neither calcification nor lamination was noted in the lesion in the routine view. Both of these features are often seen in granulomata of infectious etiology; however, the presence of calcification does not rule out malignancy. Exploratory thoracotomy with either incisional or excisional biopsy is ordinarily needed. Pathologic examination by gross and frozen section technic should aid the surgeon in diagnosis. Following this consultation and further exploration of the lung, the hilum and the mediastinal node-bearing areas, the surgeon can decide on the therapeutic procedure required. This may be as little as segmental resection of the involved lung or as great as pneumonectomy and mediastinal node resection.

Peripheral lesions are often adenocarcinomas and may be of the bronchiolar or "alveolar cell" type. In this instance, if pleural seeding or chest wall involvement has not occurred, the prognosis for survival is good, compared with the more medially located bronchogenic carcinomas. Thus, early diagnosis and treatment may be curative. ◄

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ABSTRACTS

BOOK REVIEWS

NEW HOPE FOR YOUR SKIN

Irwin J. Lubowe, M.D., PocketBooks, Inc., New York, 1966; illustrated: $0.75.

This is a pocketbook edition of a regular-sized book printed in 1963.

It is not a textbook; it is written in layman's terms for easy readability, to provide a source of information and a reference manual for the non-medical reader. It presents new developments, ideas, and slants in skin care.

A physician might read this book for general information or he might acquire it to use as a "lender" to his patients.

Although titled "illustrated", only 14 are included, some of doubtful value and two sets with switched captions. Five diagrams are included but three of these are of the "poison" plants—who can learn to identify poison ivy by studying line drawings?

ALVIN J. HALEY, M.D.
Fort Wayne

THE BIOLOGY OF VIRUSES

K. M. Smith, Ph.D., Oxford University Press, London, England, 1965; 142 pages; several illustrations; 12 shillings.

This little pocket-sized book is one of those occasional troves that all book reviewers hope to find (but rarely do).

In clear, unpretentious language, the erudite author proceeds to dispense with semantics and concentrate on presenting to the fascinated reader the meat of the matter: what are viruses? What do they do? How do they differ and what broad similarities are there? Is there really hope of finding soon the viral cause of cancer?

The non-specialist will find this entertaining AND instructive. I started a sceptic and found myself engrossed with the exposition as if it were a novel.

The publisher and the author are to be congratulated with their accomplishments. It can be recommended most earnestly!

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

THE MEDICAL LEXICOGRAPHER

J. E. Schmidt, M.D., Charles C Thomas, Springfield, Ill., 1966; $4.75.

The publication of this delightful book will come as a great satisfaction to the many admiring readers who have enjoyed Doctor Schmidt's column "Medical Lexicographer" in *Modern Medicine* during the past 20 and more years. To those who know this column, it is not necessary to say that the book is a goldmine of the most interesting and entertaining talk about words, some entirely new, and many newly and more precisely defined, and all suitably embellished with a whimsey and philosophy that is an extra dividend.

Thousands of readers of Doctor Schmidt's column have taken part in the creation of this book by writing to him with questions about medical words and their meanings. It is the replies to these inquiries that form the basis of most of the book's contents. The range of subject matter has come not only from the author's great experience and life long interests, but from the wide range of interest of his worldwide correspondents coming as they have from members of the medical profession in all fields of practice, from scientists in allied professions, as well as from famous medi-

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Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

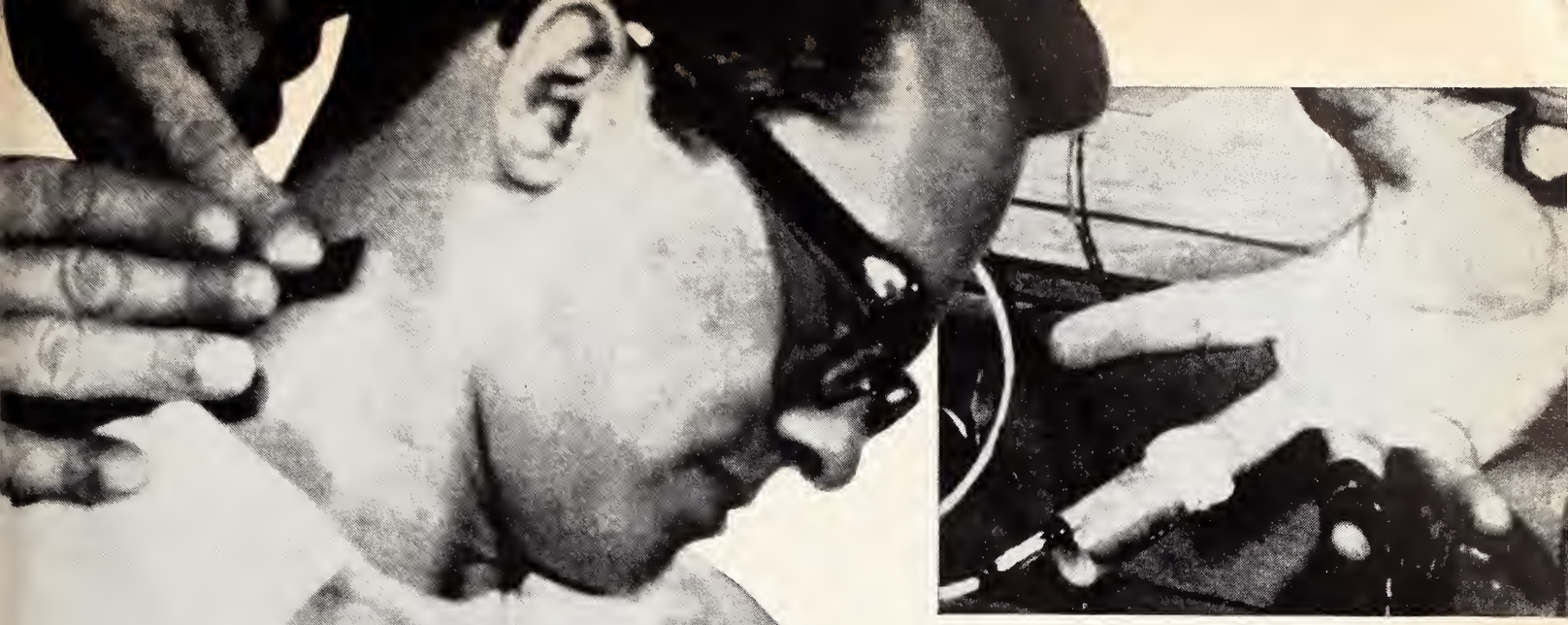
Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—*Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions)

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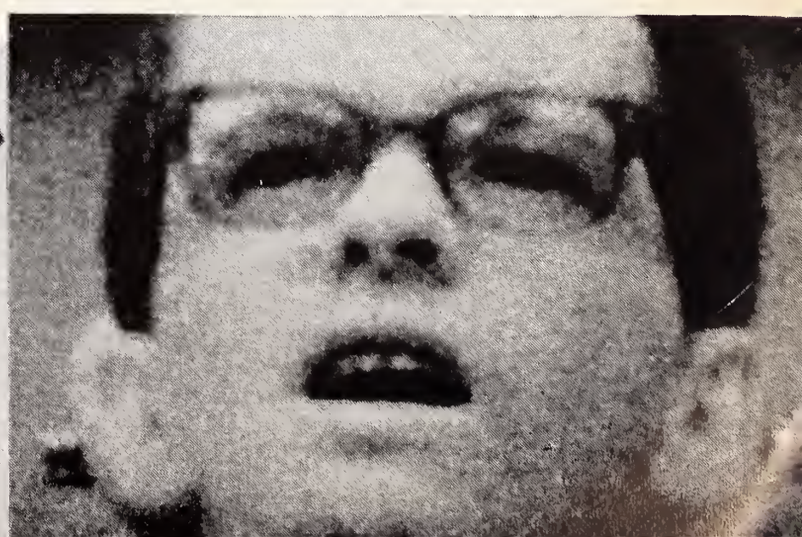


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cal authorities and teachers.

One of the features of the book is an invention of the writer which he previously used in one of his many books on words, and this is the so-called "reversicon" which is an extra index in which the *meaning* of the word is indexed and this leads to the word. The book also contains an ordinary index of the words by which the meanings are found as in a regular dictionary.

The greater part of the book will be of special interest to the average physician who wants to find a definition, but to many the chief interest will be the more detailed etymological treatment of meanings for which no words were previously available. This will have great interest for linguists, and the many enthusiasts who devote themselves to the finer implications of language for specialized needs. As stated in the introduction, no one, no matter how simple his interests or how profound his knowledge, can fail to find this book useful and fascinatingly entertaining.

This book has only one fault—it is not nearly large enough. There are missing many of the entertaining discussions which one recalls from past years of reading the "Medical Lexicographer." It might be hoped that a subsequent edition may be expanded to include more and more of this wonderfully enticing writing by a master of the use of words.

LALL G. MONTGOMERY, M.D.
Muncie

YANQUI, COME BACK

W. B. Walsh, M.D., E. P. Dutton & Co., New York, 1966; 190 pages.

The long suffering book reviewer IS entitled to an occasional, delightful, totally unexpected New Year's present! This unheralded volume is surely in this category.

Absolutely unpretentious, quietly and graciously, it narrates the saga of S.S. HOPE as it sailed for Peru to spend a dedicated year of not being just goody-goody but being good to the people of the port city of Trujillo, Peru. It tells of the trials and tribulations, the disappointments and triumphs: abundantly illustrated with wonderful photos that carry their message of man's essential humanity to man!

This volume will make a wonderful present to your cynical peers, to the Greenwich Village doubters: most of all, I cannot imagine a nicer present to yourself!

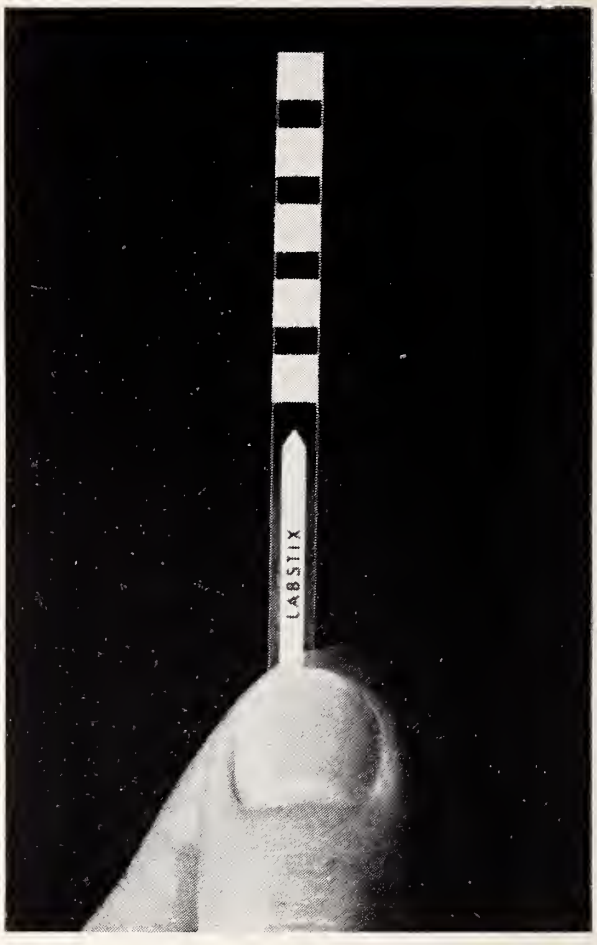
ARNOLD LIEBERMAN, M.D.
New York, N.Y.

THE PRE-SCHOOL CHILD'S LEARNING PROCESS (AND HOW PARENTS CAN HELP)

"Discussed" by Edward B. Rosenberg, B.S., and Silas L. Warner, M.D., Budlong Press Co., Chicago, Ill., 1967; 102 pages; illustrated; $1.50. (This booklet is available only through professional sources.)

This small book should be of great value to any parent of a child younger than six in a direct way, but it also will help him indirectly with problems of older children, too. This is a remarkably common-sense-yet-scientific discussion which fortunately emphasizes insight of the parents into their own personalities and attitudes as of prime importance in solving problems of family guidance.

The material is presented in straightforward, everyday English and in a sincere, friendly manner. Furthermore, there is no feeling that the authors are "talking down" to the reader. In fact, the style is conversational and informal, and parents are not subjected to exhortations exhausting the entire subject (and them, too) but are shown principles by which they can pursue different



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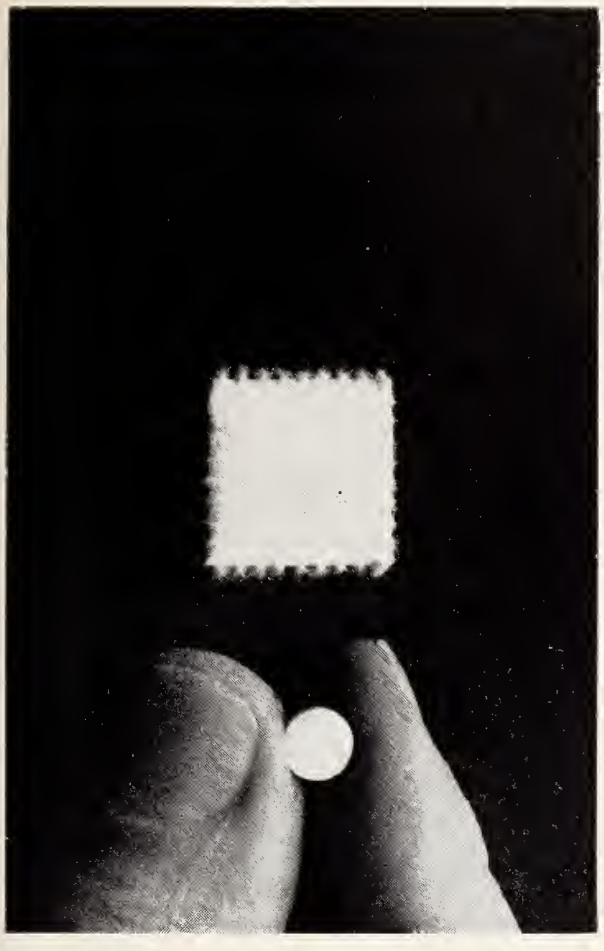
*Blood; ketones; glucose; protein, and pH.

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aspects of a child's primary learning to their own satisfactory conclusions.

A. W. CAVINS, M.D.
Terre Haute

CONFLICT IN SOCIETY

Ciba Foundation Symposium edited by Anthony De Reuck and Julie Knight; Little, Brown & Co., Boston, Mass., 1966; 467 pages; $13.00.

This symposium deals with an extraordinarily intriguing topic compactly summarized by the title. Sociologists, psychologists, ecologists and other interested people have actually created an almost new discipline. As recently as 1959, the University of Michigan set up a "Center for Research on Conflict Resolution." Within this decade, there has been created in Oslo, Norway a "Peace Research Institute" that publishes *The Journal of Conflict Resolution*. In England, in 1963, the "Conflict Research Society" was set up. The present symposium reflects, within the scope of a score of chapters, the opinions of as many individuals pioneering in this area.

Some of the titles are self-explanatory as: "Conflict in Cities", "Nature of Authority", "Compliance in Modern Society", "The Role of Law in Conflict Resolution," "International Aspects of Conflict", etc.. The discussions are geared for any intelligent person having a special interest in the social sciences. The printing, binding and editorial direction are worthy of the usual high praise.

Any doctor (and his wife) desirous of a change of pace from the humdrum routine could read this volume both for education and pleasure. As an entire aside, I might mention (NOT a prepaid announcement) a recent best seller that became more understandable to me after I read this Ciba symposium. I am referring to *The Territorial Imperative* by Robert Ardsley (Atheneum Press). It is amazing how one made the other more intelligible to me and vice versa!!

ARNOLD LIEBERMAN, M.D.
New York, N.Y.

Abstracts From Various Literature, Prepared by AMA

HOUSING SELECTED GYNECOLOGIC PATIENTS WITH OBSTETRIC PATIENTS

S. L. Andelman, R. E. Lane, and G. A. Lindsley (Chicago Board of Health, Civic Center, Chicago)

Hospitals 40:50-54, (Nov. 1), 1966.

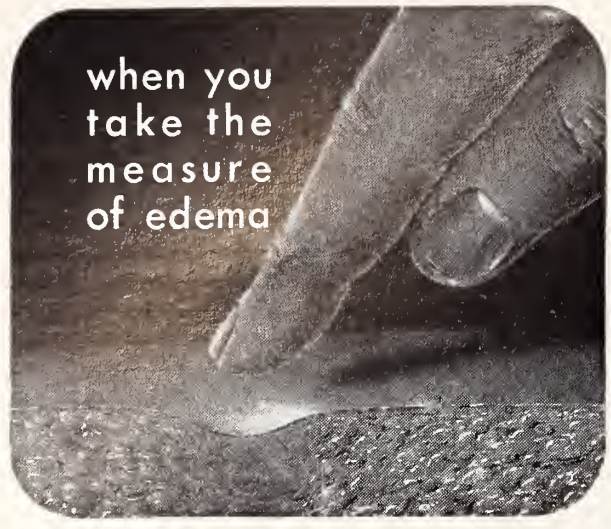
The findings are reported of a two-year study of mixing on the same ward selected gynecologic cases with maternity cases. The mixing was done under strictly controlled conditions in 12 Chicago hospitals. In comparing the Chicago group with a national study group used as a control, it was found that this mixing did not alter obstetric complications nor cause an increase in maternal and perinatal mortality.

LACTOSE INTOLERANCE IN ADULTS

H. Siebner and D. Klaus (Medizinische Universitats-Poliklinik, Liebermeisterstr. 14, Tubingen, Germany)

Deutsche Med. Wschr. 91:2149-2153, (Dec. 2), 1966.

The clinical significance, diagnostic features and therapy of lactose deficiency in small intestinal epithelium is described, based on observations in eight adult patients with lactose intolerance. Cardinal symptoms were abdominal complaints and watery acid



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AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur. Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

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diarrhea after the consumption of milk or other lactose-containing products. In the adult it is difficult to make a distinction between primary congenital enzyme deficiency and a secondary acquired one, unless histological and clinical findings provide definite reasons for assigning them to the latter group. The familial incidence of lactose intolerance in adults and the fact that symptoms could be traced back into early childhood in four of the seven cases suggest that they are instances of primary, i.e., genetically determined, lactose deficiency. It was the result of decreased residual lactose activity following acquired small intestinal disease, of little importance in itself, manifesting itself only in adult life; after its cure or radical withdrawal of lactose it produced no further symptoms.

MUST HEPARIN BE NEUTRALIZED FOLLOWING OPEN-HEART OPERATIONS?

A. R. Castaneda (Dept. of Surgery, Univ. of Minneapolis Medical Center, Minneapolis, Minn.)

J. Thor. Cardiov. Surg. 52:716-724, (Nov.), 1966.

Ninety-two consecutive patients underwent open-heart operations without post-bypass exogenous heparin neutralization. No patient required reoperation for clinical evidence of early postoperative thromboembolic phenomena. This study confirms the concept that withholding neutralization of heparin, particularly after prosthetic valve implantation, does no harm and may be beneficial when accompanied by meticulous surgical hemostasis and strict supervision of the patient.

PRIMARY SCLEROSING CHOLANGITIS

F. Glenn and J. C. Whitsell II (New York Hospital-Cornell Medical Center, New York)

Surg. Gynec. Obstet. 123:1037-1046, (Nov.), 1966.

Chronic sclerosing cholangitis is an uncommon disease of unknown cause. Criteria for its diagnosis are progressive biliary obstruction, exclusion of surgical injury as a possible etiologic agent, and operative demonstration of a diffuse sclerosing process involving the common duct, frequently the hepatic ducts, and sometimes the gallbladder. The fibrotic process and absence of malignant neoplasm require histologic confirmation. Progressive jaundice is present in the later stages of the disease, but its absence early in a patient's illness need not militate against the diagnosis if the other criteria, especially right upper quadrant pain and tenderness, are present. Progressive jaundice most often results in operation at which time definitive diagnosis is established. Seven patients were studied in whom the diagnosis of chronic sclerosing cholangitis was established. Treatment and management included surgical exploration to establish the diagnosis and decompression of the biliary system whenever this was feasible. There is no specific therapy, but long-term T-tube decompression of the common duct is advisable. The clinical course is variable. For most patients the ultimate prognosis is unfavorable because of biliary cirrhosis.

MICROBIOLOGICAL EFFECTS OF CARPETING ON THE HOSPITAL ENVIRONMENT

J. G. Shaffer and I. Key (Lutheran General Hosp., Park Ridge, Ill.)

Hospitals 40:126-139, (Nov. 16), 1966.

The results of a one-year study of the effect of carpeting on the microbiology of the air in four floors of a hospital are presented. Half of each floor was covered with carpeting and the other half, with resilient tile. Samples were taken weekly and results compared for the tiled and carpeted areas. Various methods were used for sampling the bacterial content of the air and of the carpet and floor surfaces. The air-borne content of bacteria varied

considerably on the different floors, with the obstetrics and gynecology area showing less weekly variation than other floors. No evidence was found which would indicate infectious hazard produced by the carpet.

POSSIBLE INJURY TO THE CARDIOVASCULAR SYSTEM FROM VITAMIN D

H. B. Taussig (The Johns Hopkins Hosp., Baltimore)

Ann. Intern. Med. 65:1195-1200, (Dec.), 1966.

The possibility of injury to the cardiovascular system by vitamin D lies in the evidence that some relation exists between idiopathic hypercalcemia and the type of supravalvular aortic stenosis which is associated with peripheral pulmonary stenosis, mental retardation and a peculiar facies. The facies of these patients with supravalvular aortic stenosis were strikingly similar to those of children who survive the severe form of idiopathic hypercalcemia. Autopsies on infants with idiopathic hypercalcemia have shown evidence of widespread injury to the cardiovascular system and abnormalities of the aortic valve. One child who had idiopathic hypercalcemia and died at 16 years had supravalvular aortic stenosis. One infant with supravalvular aortic stenosis had a high blood calcium level and showed a response to vitamin D similar to that which occurs in the idiopathic hypercalcemia. Idiopathic hypercalcemia is known to be related to the amount of vitamin D ingested or to the vitamin D metabolism and is considered as an "inborn error" in the metabolism of vitamin D. Friedman's experimental studies on rabbits showed that vitamin D could pass through the placenta and that large doses of vitamin D fed to the mother caused the offspring to have abnormally high levels of vitamin D at birth; weeks later an average dose of vitamin D caused a toxic reaction similar to that which occurs from feeding of massive amounts of vitamin D. These observations strongly suggest that vitamin D may be injurious to the cardiovascular system before and after birth.

ANALGESIC ABUSE AND RENAL DISEASE IN NORTH-EAST SCOTLAND

L. F. Prescott (Dept. of Materia Medica and Therapeutics, Univ. Medical Buildings, Foresterhill, Aberdeen, Scotland)

Lancet 2:1143-1145, (Nov. 26), 1966.

Thirty-six patients (31 female and five male) with renal lesions had a history of analgesic abuse; all had either a raised blood-urea level or radiological evidence of renal papillary necrosis, and 16 patients had urinary tract infection. Four patients died in uremia, and a further two died with acute renal papillary necrosis. In 30 patients, the hemoglobin was 80% (11.8 gm/100 ml) or less, and in 13 the anemia preceded the onset of azotemia. Twenty-one patients had taken preparations containing codeine, and the misuse of analgesics was common, with no less than 12 patients taking analgesics for inappropriate reasons such as for insomnia and as stimulants. Analgesics containing phenacetin had been taken by all the patients except one who took only aspirin and paracetamol. The mean duration of analgesic abuse was 14.9 years, and the average consumption was more than ten tablets daily.

SUBTOTAL PANCREATECTOMY IN MANAGEMENT OF SEVERE IDIOPATHIC HYPOGLYCEMIA IN CHILDREN

J. P. Hamilton et al. (L. Baker, 1740 Bainbridge St., Philadelphia)

Pediatrics 39:49-58, (Jan.), 1967.

Twelve cases of severe persistent idiopathic hypoglycemia of infancy treated by partial (80%) pancreatectomy are reviewed; 11 of these maintained normal blood glucose levels postoperatively. Six patients of this group required medical supportive treatment

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Iodide contraindications: tuberculosis, pregnancy.

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One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

for various periods of time in addition to surgery. A total of 45 other operative cases found in the literature are reviewed and presented in table form. Overall, 89% of these were able to achieve acceptable control of their hypoglycemia. Partial pancreatectomy deserves a role in the treatment of severe persistent idiopathic hypoglycemia of infancy. However, surgery should not be looked on as an alternative to vigorous medical management; it should be considered as one of several means which may have to be used, often simultaneously, in the vigorous treatment of these children.

PATENT DUCTUS ARTERIOSUS DIAGNOSED BY A MOSQUITO BITE OR THE CUTIS QUINCKE

J. D. Holden, R. C. Jones, and W. A. Akers (Fitzsimons General Hosp., Denver)

Arch. Derm. 94:742, (Dec.), 1966.

A "blinking" mosquito bite on the leg of an infant led to a search for a cause of widened capillary pulse pressure. Examination revealed an unsuspected patent ductus arteriosus.

BACTERIAL INTERFERENCE IN THERAPY OF RECURRENT STAPHYLOCOCCAL INFECTIONS

D. J. Drutz, et al. (George Hunter Laboratory, Vanderbilt Hosp., Nashville, Tenn.)

New Eng. J. Med. 275:1161-1164, (Nov. 24), 1966.

A patient with recurrent furunculosis and an underlying undiagnosed skin disease harbored strains of staphylococci in her nose apparently identical to those producing her skin lesions. Treatment was carried out by bacterial interference utilizing the 502A strain of *Staphylococcus aureus*. The nasal mucosa was successfully colonized with 502A, although elimination of the original staphylococcal flora was not achieved. The incidence of staphylococcal flora was not achieved. The incidence of staphylococcal lesions was reduced on this program. However, 502A was isolated from all but one of the abscesses which did occur subsequently, twice in pure culture. This is the first reported instance of staphylococcal disease following the implantation of the 502A staphylococcus. It is apparent that this "relatively nonpathogenic microorganism" can produce staphylococcal disease when host factors exist.

HEMATOMAS OF THE DUODENAL WALL IN THE COURSE OF ANTICOAGULANT THERAPY

P. Chiche and J. Leymarios

Presse. Med. 74:2475-2478, (Nov. 12), 1966.

Intramural hematomas of the intestinal walls present a relatively rare complication of anticoagulant therapy. Their manifestations are: intestinal obstruction, digestive hemorrhage, palpable intestinal mass and the presence of segmental stenosis following a barium meal. Most frequently they are localized in the jejunum but other localizations such as duodenum are also possible. The presence of cutaneous or visceral hemorrhages and indication of anticoagulant therapy combined with prolongation of Quick's time point to the diagnosis. Medical treatment usually leads to reabsorption of the hematoma. Surgery is considered hazardous in patients with vascular fragility but can be justified when diagnosis is uncertain or when there is suspicion of an associated lesion. Particular features concerning duodenal localization of hematomas in anticoagulant therapy are reviewed. Possible diagnostic difficulties related to intestinal hemorrhage without hematoma are emphasized. ◄

Tandearil®
oxyphenbutazone

Tandearil in Painful Shoulder

Therapeutic Effects: Stiffness and pain may diminish within 2 days, and full mobility may be restored within a week. These effects are obtained with oxyphenbutazone alone or combined with physiotherapy or local hormonal injections. The drug is usually well tolerated and does not affect pituitary-adrenal function or immune response.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Painful Shoulder: 600 mg. daily in divided doses for 2 to 3 days; 300 mg. daily thereafter. Usual duration of therapy: 2 to 7 days.

Availability: Tablets of 100 mg. 6562-VI(B)R

For complete details, please refer to full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

Geigy

Tandearil® oxyphenbutazone helps painful shoulders move again



3 out of 4 painful shoulder patients responded well

84.2% of 127 patients

81% of 48 patients

Please see adjoining page for brief prescribing summary.

TA-5094PC

Sperling, I.L.: Applied Therap. 6:117, 1964
Rosenbaum, E.E., and Schwarz, G.R. Northwest Med. 61:927, 1962.

Why these 7 patients with moderate to severe anxiety may respond better to Mellaril

1. The agitated patient.
Anxiety—particularly that beyond the range of minor tranquilizers—frequently is expressed as gross motor restlessness, fidgetiness and purposeless movements, and may erupt into aggressive behavior. Mellaril is almost a specific for those patients whose anxiety follows such a pattern.





The psychosomatic patient.

e family physician is rarely given
e diagnostic luxury of a classic,
tbook "anxiety state." Most often
must probe for anxiety masked by
unctional disorder—or which exac-
bates a somatic problem. Double-
nd evaluations have demonstrated
it Mellaril can be a significant ad-
ict in the treatment of such patients.



The patient under uational stress.

llaril helps the patient deal with
esses of everyday life. Nonhabitu-
ng, it can be given for extended pe-
ds of time. It does not "separate"
patient from practical problems
l pressures, does not induce eupho-
or a fuzziness which can compro-
ise the ability to cope with reali-
ties. Rather, it helps the patient
move more competently in his
daily world by eliminating use-
less tension, by allowing him to
conserve emotional resources
and energies, and to direct
them against the problems
really worth worrying about.



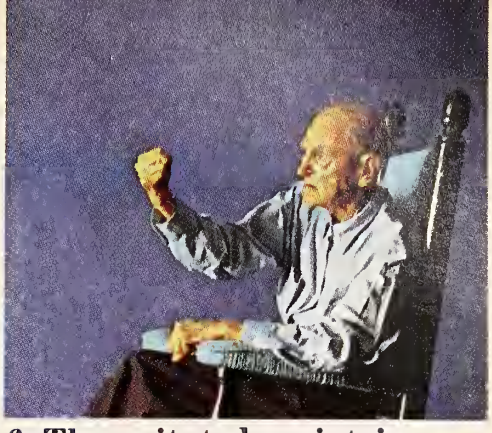
4. The menopausal patient.

The woman who sees change of life as the end of useful life requires support from both family and family physician. Whether the psychological impact of menopause is directly related to hormonal changes, or merely coincidental, is debatable, but estrogenic therapy is frequently inadequate. Mellaril is a useful aid for these patients and, alone, or in combination with reduced estrogen dosage, will help ease the menopausal misery.



5. The previously hospitalized psychiatric patient.

Such a patient may still require the type of medication he has been accustomed to, but because he is no longer in a controlled setting the acceptable level of adverse reactions must be lower. In such circumstances Mellaril is perhaps the drug of choice.



6. The agitated geriatric.

Tranquilizer therapy in the elderly patient always involves special (or at least accentuated) problems: the possibility of drug-induced ataxia, hypotension or depression, for example, assumes an additional significance. These reactions have rarely been observed in geriatric patients treated with Mellaril.



7. The constantly returning patient.

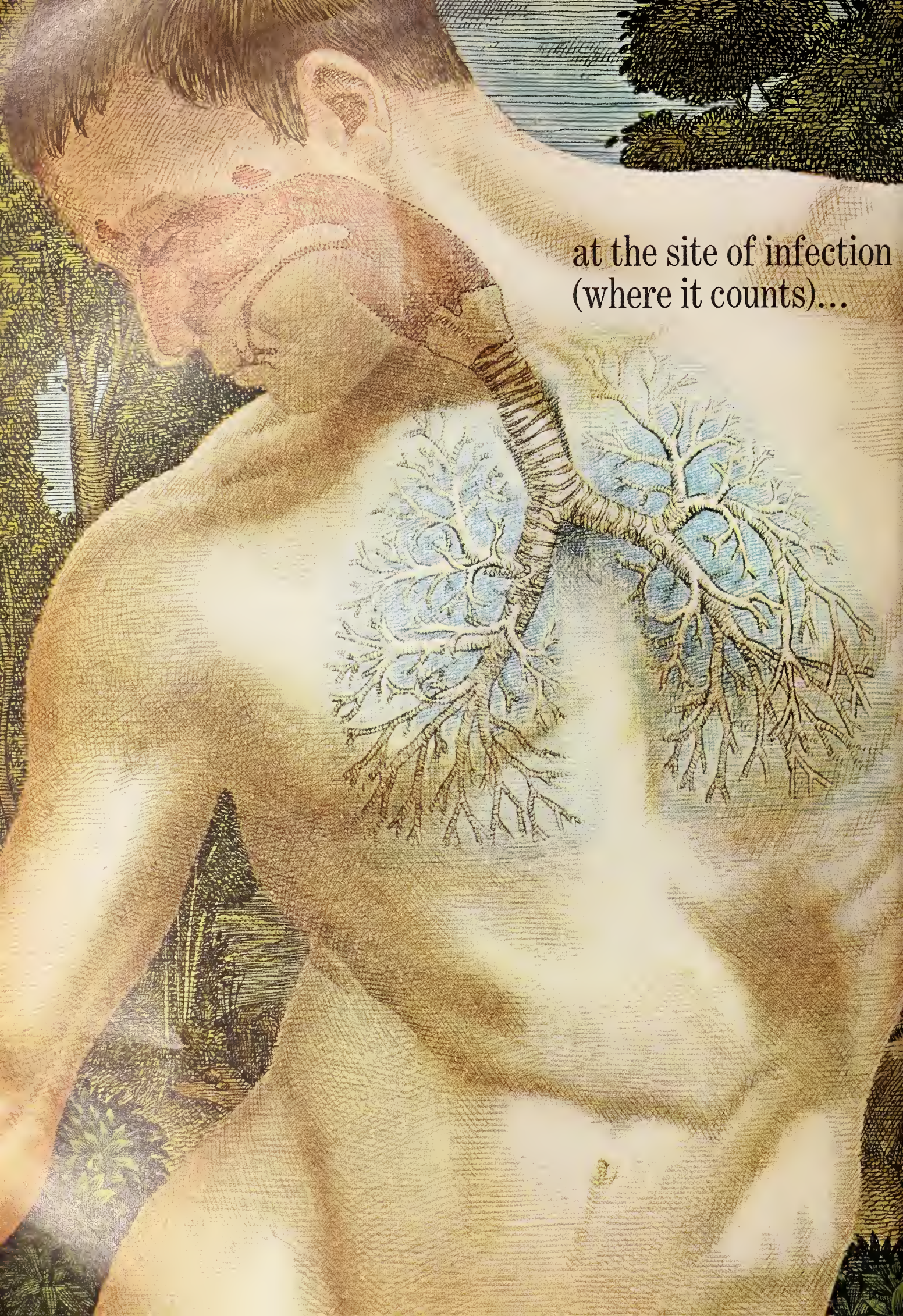
The anxiety patient who has not responded to a minor tranquilizer is not very likely to benefit from your minor tranquilizer of second choice. A major tranquilizer, such as Mellaril, may be indicated in such patients.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.
Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.
Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.
Before prescribing, see package insert for full product information.

in moderate to severe anxiety, 25 mg. t.i.d.

Mellaril®
(thioridazine)

SANDOZ


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/ the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings v characterized by increased direct-reacting bilirubin, elev alkaline phosphatase levels, negative or weakly positive ceph flocculation and thymol turbidity tests, elevated serum gluta oxalacetic transaminase levels, peripheral eosinophilia, and mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months, patients with rheumatic fever have taken prophylactic dose 0.5 Gm. daily for two years without difficulty. In one grou 144 patients who received the drug daily for two years, no ja dice was noted. It was of interest that members of six of t patients' families, who were not taking the drug, had epis of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels v determined in a group of fifty-four adults and children who 250 mg. of Ilosone daily for an average of sixteen month rheumatic fever prophylaxis. The results were compared those of a similar group of forty-four patients who received icillin. There were no cases of jaundice in either group. Eleva of SGPT and serum alkaline phosphatase levels during the co of treatment was observed in one patient treated with Ilo and in two patients treated with penicillin. Seven other pati in the group receiving Ilosone and four others in the penic group showed elevations in one of the tests at some time du administration of the drugs.

Very satisfactory therapeutic results, without toxicity, v reported in 102 pediatric patients who received short-term (day) courses of Ilosone in the treatment of streptococcus ir tions. Results of liver function tests in these patients were parable to those in a similar control group who had rece penicillin.

Gastro-intestinal disturbances not associated with hepati fects are observed in a small proportion of individuals as a r of a local stimulating effect of the medication on the alimen tract; however, the normal intestinal gram-negative bact flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the of erythromycin, there have been occasional reports of urtic skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.
Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of weight, the usual dosage is 5 mg. per pound every six hours children twenty-five to fifty pounds, 125 mg. every six h (Tablets Ilosone Chewable should be chewed or crushed swallowed with water.)

For adults and for children over fifty pounds, the usual do of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythrom therapy should be considered.

In the treatment of syphilis, the recommended total dosa 20 to 30 Gm. given in divided doses for a period of ten to fi days. Close follow-up of the patient is necessary since ery mycin drugs have not had adequate evaluation in all stag syphilis. Examinations of spinal fluid are recommended as of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days recommended. In the treatment of gonorrhea, patients wi suspected lesion of syphilis should have a dark-field examin before receiving antibiotics, and monthly serologic tests sh be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to b in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 1 size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equiv to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size pack

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69,
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398,
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Li



DR. ROBERT S. SPARKMAN SPEAKER FOR JUNE HISTORY OF MEDICINE SOCIETY MEETING

Dr. Robert S. Sparkman, noted surgeon and medical historian, will speak on "June 15, 1867, A Day to Remember" at the June 8 meeting of the John Shaw Billings History of Medicine Society.

Dr. Sparkman, of Dallas, Texas, will speak on his research into the life of Dr. John Bobbs, Indianapolis surgeon, who performed the first cholecystotomy. The centennial of the operation is June 15. (Dr. Sparkman's articles on Dr. Bobbs and Mary Wiggins Burnsworth, his patient, appear in this issue of *The Journal*.)

The group meets at the I.U. Student Union Building, Indianapolis. The social hour begins at 6:00 p.m., dinner is set for 6:45 p.m. and the speaker at 8 p.m.

I.U. Junior Awarded $1,235 SKF Foreign Fellowship to Africa

James H. Woods, a junior at the Indiana University School of Medicine, Indianapolis, has been awarded a $1,235 fellowship which will permit him to assist for 11 weeks this fall in a mission hospital in West Africa.



Woods, son of the Rev. and Mrs. W. L. Woods, R.R. #1, Coldwater, Michigan is one of 31 American medical students selected to receive Smith Kline & French Laboratories Foreign Fellowships from the Association of American Medical Colleges. The fellowships are supported by a grant from the Philadelphia prescription drug firm.

Woods will leave in September for the United Missionary Society Hospital in Tungan Magajiya, Nigeria, where he will work under the supervision of Ross H. Bell, M.D., Medical Superintendent.

The hospital is a 100-bed complex and is one of only three hospitals serving an area within a radius of 50 miles with a population estimated at about one million.

A graduate of Taylor University, Woods is the sixth student from his medical school to be awarded a Smith Kline & French Foreign Fellowship. Now entering its eighth year, the Smith Kline & French Foreign Fellowships program was established to permit American medical students to widen their medical horizons in cultures very different from their own.

In the past seven years 215 Fellows have served in 49 countries of Africa, Asia and Latin America.

Dr. Beeler Elected

Dr. John W. Beeler, Indianapolis, was recently elected Chairman of the Council of the American College of Radiology at the group's annual meeting in Los Angeles.

Riley Memorial Association Announces Three Two-week Camps

Physically handicapped children between the ages of eight and 15 may have the advantage of a two-week camping experience at Camp Riley in Bradford Woods near Martinsville. Three two-week camps will be conducted by the Riley Memorial Association between June 25 and August 4.

Physicians may obtain full particulars and enrollment blanks by writing the James Whitcomb Riley Memorial Association. Suite 917, 129 E. Market St., Indianapolis 46204, or by calling 634-4474 in Indianapolis.

Dr. Holland Honored

Dr. P. T. Holland of Bloomington has been elected to honorary membership in the Indiana Division of the American Cancer Society for his long and faithful service to cancer control. Dr. Holland received a citation from **Dr. Harry E. Mock, Jr.,** president of the Indiana Division. Since World War II, Dr. Holland has served the county, state and national boards in the fight against cancer. He recently resigned from the state board because of other heavy responsibilities.

$1,000 Van Meter Prize Award Announced for Original Goiter Paper

The American Thyroid Association again offers the Van Meter Prize Award, which this year has been increased to $1,000, to the essayist submitting the best manuscript of original, unpublished work concerning "Goiter—Especially its Basic Cause."

The study may relate to any aspect of the thyroid gland in all its functions in health or disease and may concern either clinical or research investigations. The manuscript should not exceed 3,000 words and must be in English. Five printed copies, double-spaced, should be sent to the secretary not later than June 1, 1967.

The award will be made at the annual meeting of the American Thyroid Association at the Michigan Union, University of Michigan, Ann Arbor, Michigan, September 14-16. A place on the program will be reserved for the winning essayist's presentation. It is suggested that the author also submit a 300 word abstract. The manuscripts not selected for the Van Meter Award then can be considered for the general program.

Heart Fund Speaker

Dr. William K. Nasser was the Heart Fund speaker at a recent Sullivan Rotary Club meeting. Dr. Nasser is on the staff at the I.U. Medical Center, Indianapolis.

"The Sinister Garden" Booklet On Poisons from Common Plants

Wyeth Laboratories has published a booklet which describes

and illustrates 56 common flowers, shrubs, vegetables and trees which may poison a child or an adult if certain parts of the plant are chewed or swallowed.

A copy of the book may be obtained by writing Wyeth Laboratories at Philadelphia, Pennsylvania.

"Future of Medical Education" Topic

Dr. George T. Lukemeyer, associate dean of the Indiana University School of Medicine, discussed "The Future of Medical Education" at a recent meeting of the Central Indiana Dietetic Association in Indianapolis.

Four New Motion Pictures on Applications of Atomic Energy

Four motion pictures on applications of atomic energy in space, nuclear power and nuclear research instruction—two semitechnical and two popular-level—have been made available by the Atomic Energy Commission for free-loan.

The films are: "The Mass of Atoms" a semitechnical, 47 minutes, black and white; "Snap-8: System for Nuclear Auxiliary Power", semitechnical, 10 minutes, color; "Atomic Energy for Space", nontechnical, 17 minutes, color; and "The Atom and Eve", nontechnical, 15 minutes, color. Write Ruth Jones, Information Office, U. S. Atomic Energy Commission, 9800 S. Cass Ave., Argonne, Illinois 60439.

Doctors Appointed

Dr. Allen Palmer, Knox, general practitioner attached to the Knox Clinic, has been appointed to a four-year term as Starke County Health Officer. **Dr. Clark McClure**, another Knox physician, has been elected chairman of the seven-member County Health Board.

ESCORT YOURSELF . . .

to Home Lawn Mineral Springs for a few days health vacation —the mineral baths and excellent meals in an atmosphere of serenity will leave your cares behind and play golf on a beautiful course.



HOME LAWN MINERAL SPRINGS

Martinsville, Indiana

M. C. Pitkin, M.D.
Medical Director

J. W. Gibbs, M.D.
Associate
Medical Director

Indiana Physicians Named to New Renal Disease Committees

The Indiana Heart Association and the Marion County Heart Association have each formed a Renal Disease Committee to broaden community service and to promote professional education and research in the kidney disease field.

Dr. George Lukemeyer, Indianapolis, will chair each committee. Other members of the state committee are **Dr. David A. Sorg,** Bluffton; **Dr. August M. Tomusk,** Fort Wayne; and **Drs. George Applegate, Kent Bradley and John P. Donohue** of Indianapolis. Members of the Marion county committee will be **Drs. B. L. Martz, Ward Laramore, Thomas Woerner, James Jay** and **Hunter Soper,** all of Indianapolis.

Dr. Holmes Promoted

Robert H. Holmes, M.D., has been promoted to the position of Medical Director for Ames Company, Elkhart.

Pfizer Laboratories Announces Continuation of Scholarships

Pfizer Laboratories announces that it will continue its custom of awarding a $1,000 scholarship to each of the 94 medical schools in the U. S.

The scholarship program was originated by Pfizer in 1962, has been operative each year since and now is continued into the 1967-68 school year. The scholarships are administered by the deans of the respective schools.

Dr. Leich is Speaker

Dr. Charles Leich, Evansville, spoke at a recent meeting of the Rotary Club there. He spoke on Judge David Davis, "Lincoln's Closest Friend."

Medical Claims Service Completes Insurance Forms Free for Doctors

Medical Claims Service, a division of Factory Claims, Inc., has organized a new type of service for physicians and their patients in the Indianapolis area.

Medical Claims Service sends one of its trained medical assistants or registered nurses to a doctor's office once a week to complete claim forms for all types of medical insurance. The cost of the service is billed to the patient or to the insurance company.

In a short period of operation, patrons of the service have been highly pleased with its function. Inquiries concerning the services may be addressed to James S. Seidell, Jr., 725 Ferndale Court, Indianapolis 46227.

Dr. Young Elected

Dr. Joseph W. Young, Greenwood, who was recently elected to the board of the Greenwood Community school board, has been appointed president of the board by the city council.

Miles Laboratories Forms New Hospital Disposables Division

Miles Laboratories is forming a new division, Lab-Tek Products, to manufacture and market disposable hospital and laboratory items such as plastic petri dishes, culture tubes and various hospital containers.

These disposables have previously been manufactured by Ames Company, a Miles' division, which will continue to market reagent test products and medical instruments. Lab-Tek Products will be located in Westmont, Illinois. Charles J. Kalt will be general manager. ◄

FUTURE MEETINGS, SEMINARS, COURSES

"Family Centered Pediatric Care" Institute Set for Evansville in June

A state-wide institute on "Family Centered Pediatric Care," sponsored by the Maternal and Child Health Council, Indiana League for Nursing and the Indiana State Board of Health, will be held June 21 in Evansville.

Sister Margarita, Supervisor of Pediatrics, St. Mary's Hospital, Evansville, will open the program with a presentation of family centered pediatric care which will include a parent interview. Nursing, medical and administrative aspects of coordinated community pediatric care will be discussed.

The meeting is open to everyone concerned with the health of children. It will be held in the Madonna Manor, St. Mary's Hospital, 3700 Washington Ave., Evansville from 9:00 a.m. to 4:00 p.m.

The Society for Cryo-Ophthalmology Announces Second Annual Meeting

The second annual meeting of the Society for Cryo-Ophthalmology will be held in Miami Beach, January 14 to 18, 1968, with Dr. Jose Barraquer, of Bogota, Colombia, presiding. The program will include a session on retinal surgery, with Dr. Giambattista, of Rome, as the featured speaker. Dr. H. Fanta, of Vienna, will lead the discussion on cryoextraction of cataracts.

Those wishing to present papers at this meeting should submit title and brief abstract to Dr. John G. Bellows, executive secretary, 30 N. Michigan Ave., Chicago, Illinois 60602, at the earliest possible date.

Rocky Mountain Cancer Conference Will be July 14-15 at Denver

The Rocky Mountain Cancer Conference will be July 14-15 this year at the Brown Palace-West Hotel, Denver, Colorado. The 21st Annual Rocky Mountain Cancer Conference will feature some of the nation's most distinguished speakers on the subject of cancer during the two days it will be in session.

Morning symposia will deal with "What's New in Cancer" and "Cancer of the Biliary System and Its Related Structures." The afternoon session of the first day will be devoted to scientific papers by guest speakers with the second afternoon devoted to an "Information Please" session.

Dr. Milford O. Rouse, president-elect of the American Medical Association, and Dr. Ashbel C. Williams, president of the American Cancer Society will participate in the conference which is co-sponsored by the Colorado Division of the American Cancer Society and the Colorado Medical Society.

Speakers on the two-day scientific program include: Arthur J. Hunnicutt, M.D., a surgeon from Oakland, California; William T. Moss, M.D., Director, Therapeutic Therapy, Chicago Wesley Memorial Hospital; Richard J. Reitemeier, M.D., Chairman of the Section on Internal Medicine, Mayo Clinic, Rochester; William O. Russell, M.D., Chief of Pathology, M.D. Anderson Hospital, Houston; and Wendell M. Stanley, Ph.D., Nobel Prize winning virologist, University of California, Berkeley.

Further information may be obtained by writing Rocky Mountain Cancer Conference, 1809 E. 18th Ave., Denver 80218.

Dr. Charles L. Hudson to Speak at Defiance College

Dr. Charles L. Hudson, president of the American Medical Association, will give an address May 24th, at Schomburg Auditorium, Dana Hall, Defiance College under the co-sponsorship of the Defiance County Medical Society and Defiance College. The time is 8 P.M. and the subject will relate to the challenge to the medical profession in the current society. The general public is invited.

Dr. Hudson will stay overnight and on Thursday morning, May 25, will appear on the Defiance College Forum for an address to the students on "Careers in Medicine."

Postgraduate Courses Announced By Superior School of Medicine

Postgraduate courses are announced by the Superior School of Medicine of the National Polytechnical Institute of Mexico. Four courses are given each year, during the last two weeks of May, July, September and November. Tuition is $200.00 American.

Annual Otolaryngologic Assembly Scheduled for October 14 through 20

The Annual Otolaryngologic Assembly of 1967 will be held October 14 through 20 in the new Illinois Eye and Ear Infirmary at the Medical Center, Chicago. The Department of Otolaryngology of the College of Medicine of the University of Illinois offers a condensed postgraduate basic and clinical program for practicing otolaryngologists under the direction of Dr. Emanuel M. Skolnik. It is designed to bring to specialists current information in medical and surgical otorhinolaryngology.

A separate, but correlated course entitled "Head and Neck Radiology Conference" will be conducted by the Department of Radiology for two full days just preceding the Assembly on Thursday and Friday, October 12 & 13. Interested physicians should direct communications to the mailing address: Department of Otolaryngology, P. O. Box 6998, Chicago, Illinois 60680.

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County, District News

Carroll

Drs. Marvin N. Golper and Milo Sekulich, Kokomo, spoke on "Mammography" at the March 15 meeting of the Carroll County Medical Society.

Cass

"Middle Ear Infections" was the topic chosen by Dr. Robert J. Braunlin, Fort Wayne, when he spoke at the March 6 meeting of the Cass County Medical Society. Thirty-six members and guests attended.

Clay

Dr. J. F. Maurer, Brazil, has been re-elected president and Dr. Forrest R. Buell, Clay City, re-elected secretary-treasurer of the Clay County Medical Society.

Dearborn-Ohio

Speaker at the March 2 meeting of the Dearborn-Ohio County Medical Society was Dr. Meese, Cincinnati cardiologist, who showed still and motion pictures of the Vinberg procedure for the revascularization of the myocardium.

Hamilton

Newly-elected president of the Hamilton County Medical Society is Dr. Paul Waitt, Sheridan. Vice-president is Dr. Adrian Lanning, Noblesville and secretary-treasurer is Dr. H. R. Blackburn, Noblesville.

Henry

"Long-Range Planning for Area-wide Comprehensive Medical Care" was the topic of Garrett R. Graham, of the Indiana Hospital Association, when he spoke at the March 16 meeting of the Henry County Medical Society.

Huntington

Howard Grindstaff, ISMA field secretary, spoke on the actions of the General Assembly and Social Security amendments at the March 21 meeting of the Huntington County Medical Society.

Jasper

Dr. Paul A. Williams is the new president and Dr. K. R. Ockermann, the secretary-treasurer of the Jasper County Medical Society. Both of the new officers are from Rensselaer.

Jay

The March 1 meeting of the Jay County Medical Society featured a talk by Dr. Arthur Sartorius, Dayton, Ohio, on "Amniocentesis and Intrauterine Fetal Transfusion in Erythroblastosis."

LaPorte

Dr. Floyd Heller, chairman of the Department of Anesthesiology at Illinois Masonic Hospital, spoke on "Current Concepts in Shock Therapy" at the March 21 meeting of the LaPorte County Medical Society.

Montgomery

Dr. William B. Ferguson, Lafayette, spoke on "Foot Problems" at the March 16 meeting of the Montgomery County Medical Society. Twenty-four members attended.

Noble

New president of the Noble County Medical Society is Dr. Robert C. Stone, Ligonier. Vice-president will be Dr. Richard Slough, Kendallville and secretary-treasurer will be Dr. Joseph A. Greenlee, Avilla.

Owen-Monroe

Kenneth Moeller, of the Medical Protective Company of Fort Wayne, spoke on "Legal-Medical Malpractice Committees" at the March 30 meeting of the Owen-Monroe County Medical Society.

Perry

New officers of the Perry County Medical Society are: Drs. Robert Gilbert, president; Gene E. Ress, vice-president and Robert A. Ward, secretary-treasurer. All of the new officers are from Tell City.

Putnam

Dr. Harvey Sigmond, Indianapolis, spoke on "Backache" at the March 10 meeting of the Putnam County Medical Society. Sixteen members attended.

Rush

"Psychiatry and General Practice" was the subject of a talk given by Dr. Richard McNabb, Carthage, at the March 14 meeting of the Rush County Medical Society.

Vanderburgh

Dr. Robert E. Hastings, director of the Mead Johnson Institute, spoke on "Higher Education Needs for Evansville and the Role of Southern Indiana Higher Education, Inc." at the March 14 meeting of the Vanderburgh County Medical Society.

Whitley

Dr. John Wilson, Columbia City is the new president; Dr. Park Huffman, South Whitley, the new vice-president and Dr. Jerome H. Wait, Columbia City, the new secretary-treasurer of the Whitley County Medical Society. ◄

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Association News

EXECUTIVE COMMITTEE

March 18, 1967

Present: Ralph V. Everly, M.D., chairman; Burton E. Kintner, M.D.; Eugene S. Rifner, M.D.; G. O. Larson, M.D.; Lowell H. Steen, M.D.; Ottis N. Olvey, M.D.; Lester H. Hoyt, M.D.

Robert Robinson, attorney, and James A. Waggener, executive secretary.

Guest: Lester D. Bibler, M.D., AMA Trustee.

Membership Report

Number of members as of December 31, 1966	4,409
1967 members as of February 28, 1967:	
Full dues paying	2,986
Residents and interns	78
Council remitted	43
Senior	301
Honorary	3
Military	40
Total 1967 members as of February 28, 1967	3,451
Number of members as of February 28, 1966	3,822
Loss over last year	371
Number of AMA members as of February 28, 1967	3,374
Total 1966 AMA members as of February 28, 1966	3,726
Loss over last year	352
1967 AMA members:	
Dues paying	2,888
Exempt, but active	491
	3,374
Number who have paid state dues but not AMA dues as of February 28, 1967	77

Headquarters Office

The insurance company settlement on the boiler was approved by consent.

The question concerning increasing the insurance on the other mechanical equipment was discussed and on motion of Drs. Larson and Rifner, the chairman of the Executive Committee and the executive secretary were authorized to investigate this further and to purchase the necessary insurance.

Treasurer's Office

The treasurer's report was approved on motion of Drs. Larson and Kintner.

Legislation

National: For the information of the committee the secretary reported on the recent news clipping quoting Vice President Humphrey as encouraging the people to write their congressmen to advocate the expansion of the Social Security program.

The secretary called to the attention of the committee the action of the New York State Medical Society concerning the implementation of Title XIX in New York state.

Local: The secretary reported, for the information of the committee, on the recent legislation passed by the state legislature, including H.B. 1420 which will require the appointment of a physician, and upon motion of Drs. Steen and Rifner, Dr. Lester H. Hoyt is to be recommended to the governor.

The secretary also reported on the veto of the governor of the bill to implement Title XIX, and it was the consensus of the committee that the association has the responsibility of making a thorough study of the federal law and to draft proposed legislation for submission to the 1969 General Assembly. Upon motion of Drs. Steen and Larson, this is to be referred to the Council Committee for the Study and Implementation of Governmental Medical Programs with the request that this committee report on its studies at each meeting of the Council.

Organization Matters

The secretary reported, for the information of the committee, on the conferences he had had with J. Russell Townsend, Jr., and representatives of the Continental Casualty Insurance Company concerning the Indiana State Medical Association disability program and he read a letter from the Continental Casualty Company in which the company reaffirmed that it would issue a policy of some type to every physician who applied, regardless of his physical condition.

Dr. Lester Bibler reported to the committee the recent action of the Board of Trustees of the AMA concerning the AMA disability plan in which the Board had proposed to increase the premiums, decrease the benefits and discontinue benefits to physicians over 70 years of age. Also, the letter from the Minnesota State Medical Association and other letters concerning the offer of the Fireman's Fund American Life Insurance Company, in which they proposed to offer the same coverage and the same benefits, at the same premium as originally offered by the AMA plan, and guarantee the premium and benefits for a period of five years, were brought to the attention of the committee. As a result of discussion of this matter, on motion of Drs. Steen and Larson, the secretary was instructed to draft a letter to the Board of Trustees of the AMA voicing the objection of the Indiana State Medical Association to the proposal of the Board to adopt the limited program rather than the offer of the Fireman's Fund and urging that no precipitous action be taken until the House of Delegates had an opportunity to fully discuss this at the June meeting of the AMA.

Dr. Rifner read a letter from Blue Shield under date of January 26, 1967, and on motion of Drs. Steen and Rifner, this matter is to be referred to the Council and Blue Shield representatives are to be asked to discuss this matter at the Council meeting.

The secretary read several pieces of correspondence from Blue Shield which were taken as information by the committee.

The secretary then presented a letter from Blue Shield in which was enclosed a copy of a proposed new contract between Blue Shield and the state of Indiana, in which Blue Shield would act as fiscal administrator on behalf of the Welfare Department for welfare recipients over 65 years of age covered under Part B of Title 18 of PL 89-97. This matter was also discussed by Mr. Robinson, the attorney, and by consent it was agreed that the attorney should attempt to write into the contract a provision whereby the county medical societies or the state medical association could act as an adjudication committee in the case of fee disputes and that as soon as this was worked out, a telephone conference shall be held with the members of the Executive Committee for approval or disapproval of the proposed contract.

Request of the University of Michigan for use of the mailing list by the Institute of Continuing Legal Education was approved by consent.

A copy of a letter from Mr. Hollowell to the Blackford County Hospital medical staff was reviewed for the information of the committee.

Upon motion of Drs. Steen and Larson, renewal of membership in the State Conference on Social Welfare was approved.

A letter from Mrs. S. K. Harrell concerning membership of the association on the Joint Committee for Improvement of Patient Care and calling attention to the payment of $25.00 membership dues was reviewed, and on motion of Drs. Larson and Steen, the naming of the representatives is to be left to Dr. Rifner, and the payment of the annual membership fee was approved.

A letter from Dr. Robert J. Miller was read and the matter was taken as information and the letter ordered filed.

A letter from Dr. Steen concerning the report of the Future Planning Committee was discussed and the discussion resulted in the following motions:

1. On motion of Drs. Steen and Rifner, a recommendation is to be made that the Council have called meetings on

alternate months for the remainder of this year.

2. The second motion was a recommendation that the Council refer to the Commission on Constitution and Bylaws the proposal that the Constitution and Bylaws be amended to call Council meetings every two months henceforth, to meet the demand of important policy decisions of the Indiana State Medical Association and to keep the Council abreast of the important matters influencing medicine in the state of Indiana.

These actions were carried unanimously and referred to the Council for implementation.

Annual Convention, Indianapolis, October 9, 10, 11 and 12, 1967

A letter from Dr. Charles Gillespie concerning use of the material of the Maternal Mortality Study Committee on the annual convention program was reviewed for the information of the committee.

On motion of Drs. Rifner and Steen, the Commission on Convention Arrangements is to be requested to consider inviting allied technical groups such as the Indiana Association of Radiological Technicians to meet jointly with the state medical association at the time of its annual conventions.

New Business

The chairman of the committee gave a report on his contacting a physician concerning his charges for caring for a state legislator during the General Assembly.

Dr. Steen gave a report on the Porter County Medical Society matter.

Dr. Rifner reported on correspondence he had had concerning the abortion bill, the Joint Liaison Committee with Veterans Affairs, and the implementation of the measles eradication program.

Journal

The secretary reported that the State Journal Advertising Bureau had accepted the proposed advertising rate increase for *The Journal*, to become effective July 1, 1967.

A letter from the State Journal Advertising Bureau concerning the association supplying free copies of *The Journal* to drug detailmen was discussed and the matter was deferred until the next meeting of the committee in order that Dr. Ramsey might discuss this with the committee.

Future Meetings

By consent it was agreed that Dr. Everly would represent the association at the Conference of School Nurses, to be held in Indianapolis on April 5, 1967.

By consent it was agreed that the two field men would be sent to Washington for the meeting with the Congressmen on April 9, 1967.

Attention was called to the annual meeting of the Woman's Auxiliary at Evansville on April 19, 1967, and several of the officers are planning on attending this meeting.

Dr. Don Wood is to be asked to represent the association at the annual meeting of the Indiana State Chamber of Commerce, French Lick, April 14-16, 1967.

Dr. Rifner was designated as the representative of the Indiana State Medical Association at the annual meeting of the Indiana Medical Assistants Association meeting, at Muncie, April 29 and 30, 1967.

Dr. Rifner also will represent the association at the annual meeting of the Indiana Tuberculosis Association, May 2 and 3, 1967.

AMA Committee on Nursing, Chicago, October 6, 1967. No action was taken on this at this time.

There being no further business the committee adjourned, to meet again at 3:00 p.m., Saturday, April 8, 1967. ◄

COMMERCIAL ANNOUNCEMENTS

ANESTHESIOLOGIST: 38-years-old, Baard eligible, experienced, university trained, desires primarily fee for service, private practice preferred. Available sametime in the next 12 manths. Write Box 336, The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Indiana 46208.

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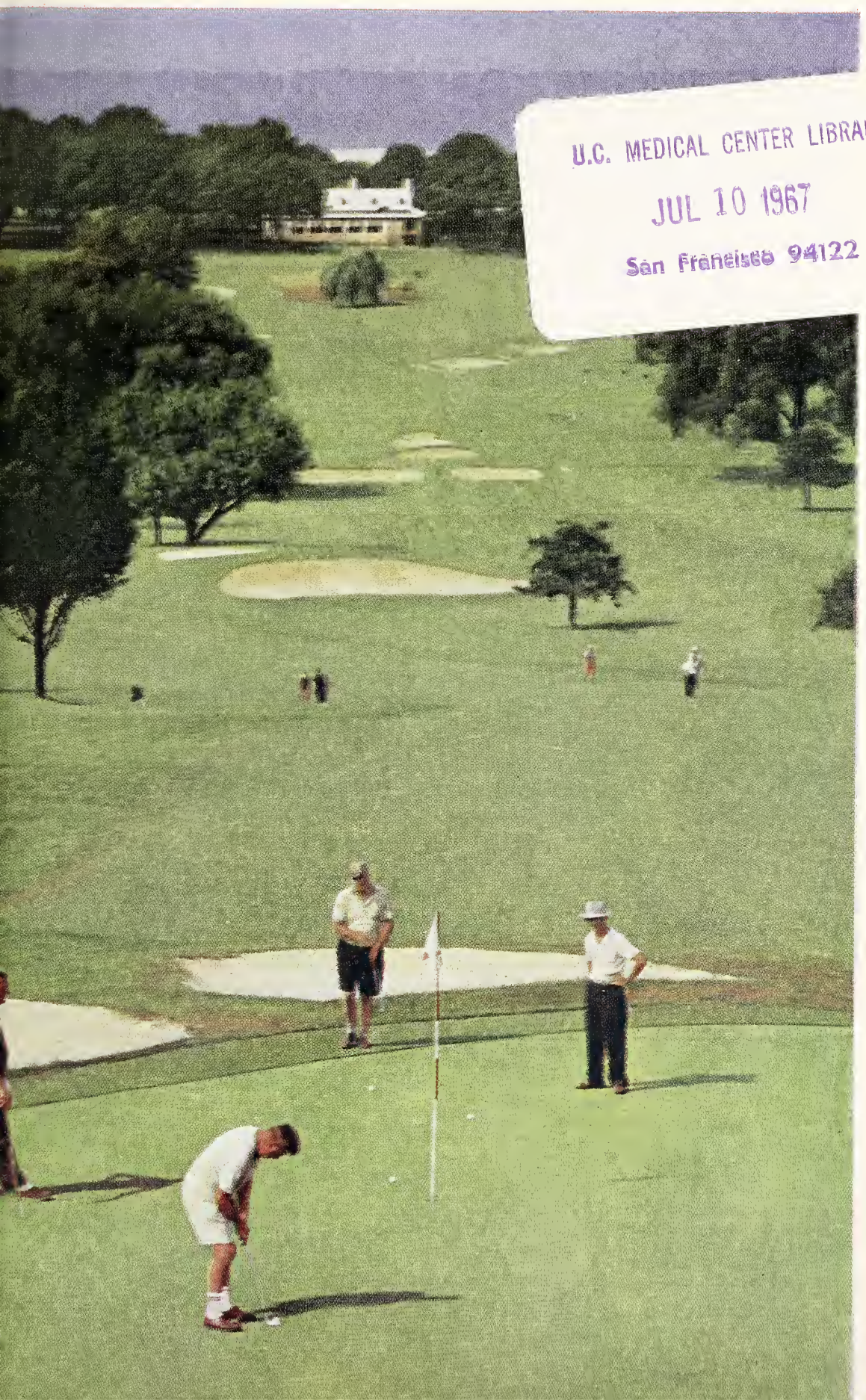
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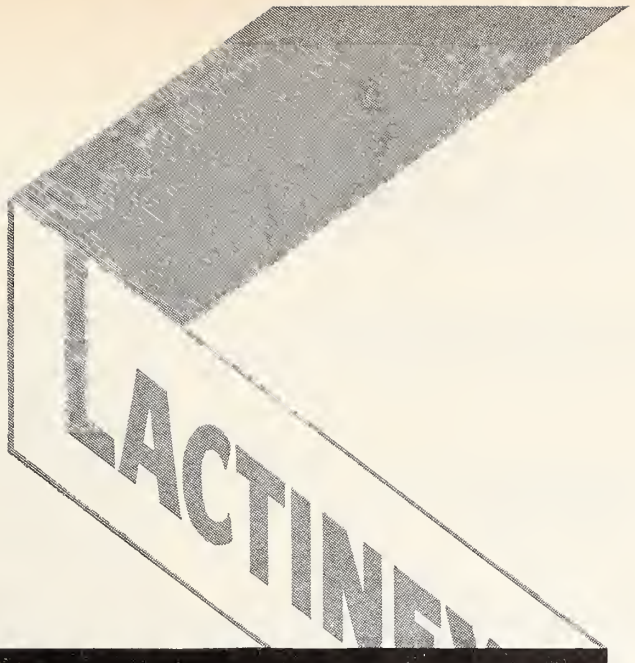


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References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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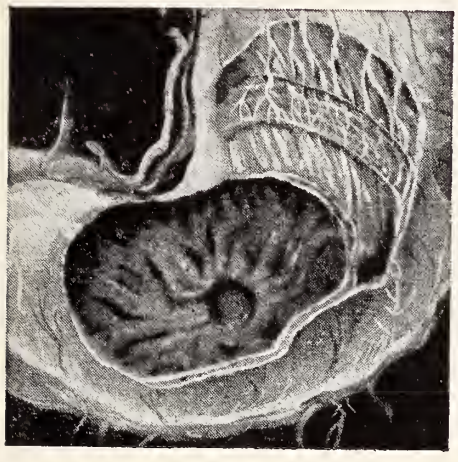
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2—	
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6—Frank Green, Rushville	1969
7—John O. Butler, Indianapolis	1969
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9—Clarence G. Kern, Lebanon	Fall, 1968
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1. Hepner, R., et al.: Pediatrics 33:94, 1964. 2. Hepner, R., et al.: Pediatrics (to be published). 3. Hansen, A. E., et al.: Pediatrics 31:171, 1963. 4. Holman, R. T.: Fed. Proceed. 23:1062, 1964. 5. Holman, R. T., et al.: Amer. J. Clin. Nut. 14:83, 1964. 6. Young, R. J., and Garrett, R. L.: J. Nut. 81:321, 1963. 7. Hepner, R.: "New Perspectives on Nutritional Aspects of Modified Milk-Fat Formulas," a colloquium held under the auspices of The Pediatric Department, Western Reserve University School of Medicine, Cleveland, Ohio, Sept. 8, 1966. 8. Carson, M., and Hart, L.: ibid. 9. Nichols, M.: ibid.



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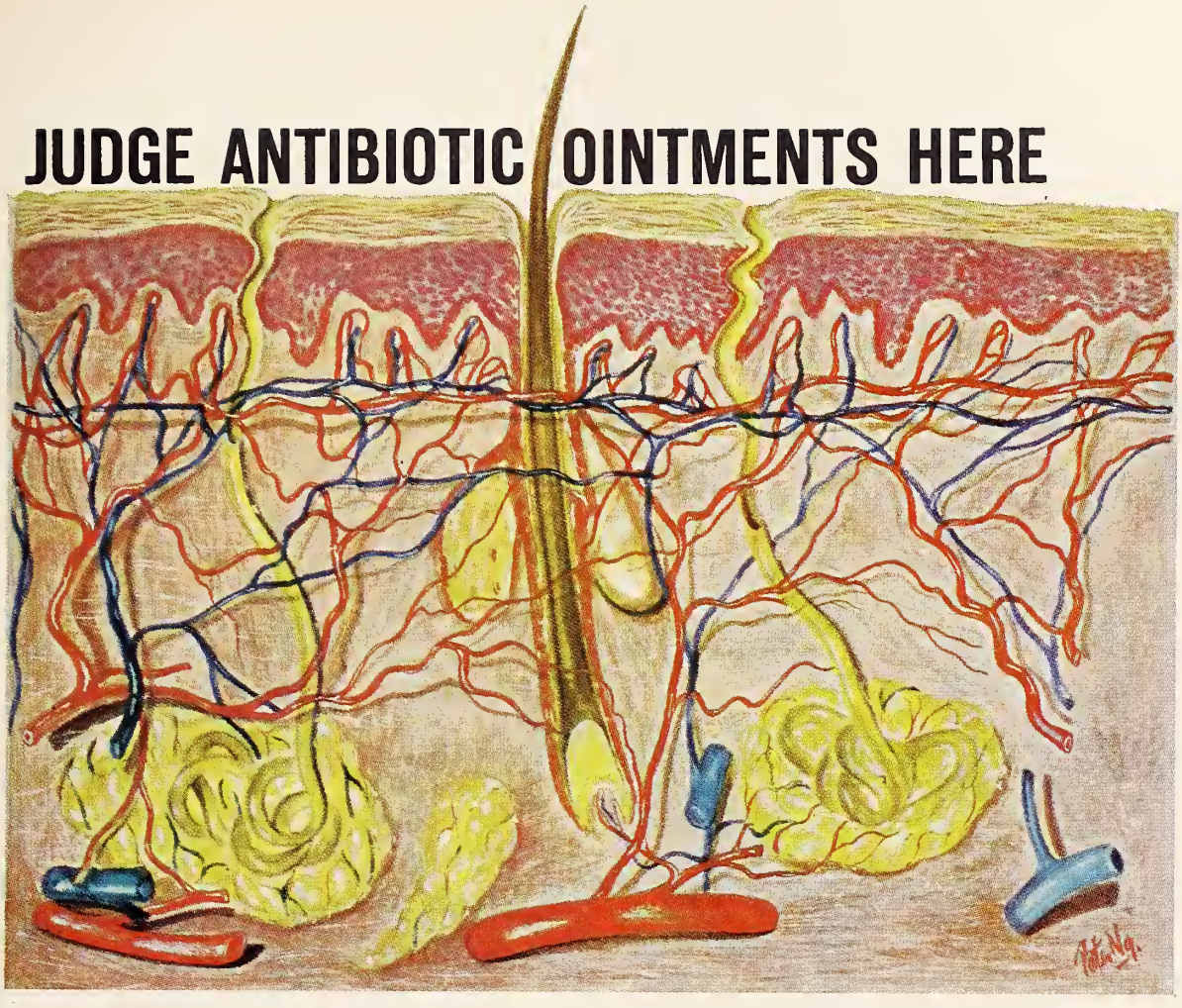
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10.	R. James Bills, Gary	John J. Reed, Hobart	
11.	Joseph Bean, Logansport	Fred Paehler, La Fantaine	Laganspart, Sept. 13, 1967
12.	Max M. Gitlin, Blufftan	Berniece Williams, Fart Wayne	
13.	Gordan Cook, Sauth Bend	John Hildebrand, South Bend	Sauth Bend, Sept. 27, 1967

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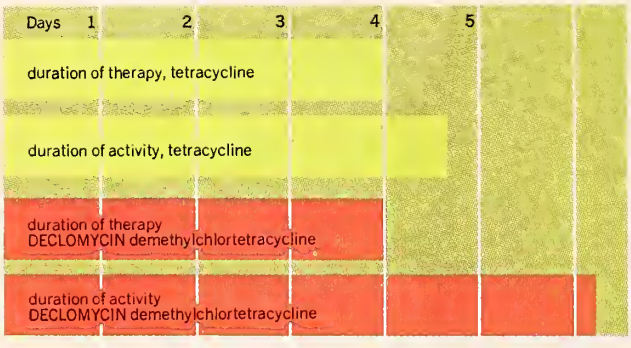
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Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

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Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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Henry	James S. McElroy, New Castle	Phyllis Grant, 3007 S. 14th St., New Castle
Howard	Donald Fields, Kokomo	Jack Higgins, 400 S. Berkley, Kokomo
Huntington	Reeve Peare, Huntington	Carl S. Ray, Warren
Jackson-Jennings	Forrest D. Ellis, North Vernon	William F. Blaisdell, 205 N. Pine, Seymour
Jasper	Paul A. Williams, Rensselaer	K. R. Ockermann, 119 W. Harrison, Rensselaer
Jay	Joseph F. Vormohr, Portland	J. S. Fitzpatrick, 603 W. Arch St., Portland
Jefferson-Switzerland	Marcella Modisett, Madison	Ott B. McAtee, Madison State Hospital, Madison
Johnson	George Brown, Greenwood	Merrill M. Wesemann, 251 E. Jefferson St., Franklin
Knox	Robert J. Nichols, Vincennes	Charles L. Miller, 301 American Bank Bldg., Vincennes
Kosciusko	Robert D. Dormire, Warsaw	Roland Snider, 604 E. Winona Ave., Warsaw
LaGrange	Lloyd R. Studebaker, LaGrange	D. L. Mattox, Box 98, Howe
Lake	David B. Templin, Lowell	Reginald R. Barton, 7737 Forrest Ave., Gary
		Mr. John B. Twyman, Ex. Dir., 4640 W. 5th Ave., Gary
LaPorte	P. J. Pilecki, Michigan City	Charles K. Liddell, 508 Pine St., Michigan City
		Mrs. Polly Dent, Exec. Dir., 903 Indiana Ave., LaPorte
Lawrence	John Reuter, Bedford	Glen D. Ley, 2900 W. 16th St., Bedford
Madison	Robert D. Williams, Markleville	William M. Stimson, 333 Jackson St., Anderson
Marion	William B. Lybrook, Indianapolis	Charles W. Cure, 1815 N. Capitol Ave., Indianapolis
		Mr. Arthur G. Loftin, Exec. Secy., 2902 N. Meridian, Indianapolis
Marshall	Marshall Stine, Bremen	Cecil R. Burket, 424 W. South St., Bremen
Miami	Parker W. Snyder, Peru	Gordon S. Crates, Denver
Montgomery	Claude N. Thompson, Waynetown	W. E. Shannon, 408 W. Market St., Crawfordsville
Morgan	Ellery T. Drake, Martinsville	Maurice A. Turner, 101½ N. Main St., Martinsville
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Orange	Marion L. Hagan, French Lick Springs	Philip T. Hodgin, Orleans
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Perry	Robert Gilbert, Tell City	Robert A. Ward, 507 Main, Tell City
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Putnam	John Ellett, Jr., Coatesville	Anne S. Nichols, 707 E. Seminary, Greencastle
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		Mr. Harry Davis, Exec. Secy., 106 W. Monroe, South Bend
Scott	Carl R. Bogardus, Austin	Ignacio B. Castro, 685 Wanda St., Scottsburg
Shelby	Joseph Moheban, Shelbyville	P. M. Inlow, 103 W. Washington, Shelbyville
Spencer	John C. Glackman, Jr., Rockport	Michael O. Monar, Rockport
Starke	Guy B. Ingwell, Knox	W. Allen Palmer, Knox
Steuben	Robert F. Barton, Angola	Wayne Schrepferman, Hamilton
Sullivan	M. H. Bedwell, Sullivan	I. S. Brown, Carlisle
Tippecanoe	Philip Rothrock, Lafayette	Lindley Wagner, 2424 Ferry St., Lafayette
Tipton	Robert L. Haller, Kempton	Albert E. Stouder, Kempton
Vanderburgh	Joseph C. Lawrence, Evansville	Mr. Arthur P. Tiernan, Exec. Secy., 109½ S. E 3rd., Evansville
Vigo	William G. Bannon, Terre Haute	Robert L. Meissel, 920 N. 19th St., Terre Haute
Wabash	John R. Dragoo, Wabash	Stanley M. Zydlo, 1025 Manchester, Wabash
Warrick	Peter B. Hoover, Boonville	Robert C. Colvin, Newburgh
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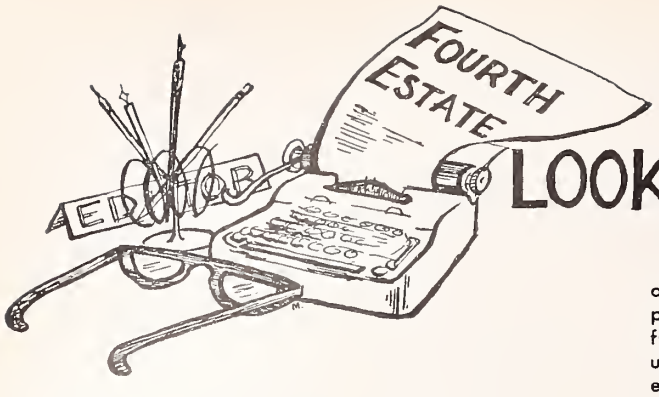
House of Delegates opening session

2:00 p.m., Monday, October 9, 1967

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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which oppear on the editoriol pages of the public press, ond which ore of interest to the medicol profession. Its function is to review comments which may be fovoroble or unfovoroble to medicine. Members ore invited to submit editoriol clippings for this column.

PERSONALLY SPEAKING

Social Security Is Out And Out Fraud

By Jameson G. Campaigne
(Editor of The Star)
(First of Three Columns)

It now turns out that Social Security retirement "insurance" is a fraud.

If you are a young man or a young woman starting out on your first job you will be paying the Federal government for the most expensive retirement program in the United States. It costs you more than any private insurance program — more than any private savings program.

You don't believe it? Well listen to these facts:

A 22-year-old worker earning $6,600 a year or more will have paid the Federal government $63,894 in Social Security taxes and accrued interest by the time he is 65. The most he can receive under the present law in retirement income from the program is $3,024 a year or $252 a month. Sounds good, doesn't it?

But suppose that same worker invested both his Social Security contribution and the contribution of his employer in the company pension program like the one we have at *The Star*. By the time he was 65 he would retire on $5,933 a year or $494 a month! That is almost *double* what he gets from Social Security. And it would be *in addition* to any company pension program!

Suppose this 22-year-old worker put his and his employer's contribution to Social Security in the bank at four percent. By the time he was 65 he would have $63,894 *in the bank*. That nest egg would produce him an income of $2,556 a year in interest. He would still have all of his capital, the whole $63,894 to spend if he wished, to leave to his wife or kids, to invest in stocks or bonds, to do what he pleases. Under his Social Security program he has nothing to leave, no money in the bank, no control over his own investment. In fact Congress can at any time change the whole Social Security system—raise payments, lower payments, take it away from you if you have other savings or income and limit the amount of money you can earn in addition to your Social Security.

Under a private plan *none* of these things is *legal*.

Suppose this young 22-year-old invested his Social Security contributions and his employers in stocks, mutual funds, a trust fund or something similar. The experience of the past 43 years indicates that he would have at 65, at least *double* what he would have from putting the money in the bank at four percent interest. He would own the stocks. His income would be twice as high, maybe three or four times as high as the Social Security can pay, and he would own all the stocks outright. He could sell them, leave them to his children or just live off the income they produce.

Social Security is the worst "investment" it is possible for a young worker to make in his retirement program. It cannot compete with any other form of savings.

That is why it is a fraud. The truth is that your Social Security "investment" is no investment at all. All of your payment goes toward paying those over 65 their *present* retirement income. You are not saving a nickel. The government isn't saving your money for your future, as an insurance or pension program does. The only "investment" the government makes with your money is in government bonds. But these are not assets. They are, in fact a debt of the government which you as a taxpayer have to pay—both in interest and principle. The government cannot use these bonds to pay off anybody without first getting the money from every taxpayer. If a private insurance company invested all of its surplus funds in its own stock or bonds, its managers would go to prison.

Not one single young worker in the United States will ever, if he lives to be 100, get back from the government in retirement income what he and his employer contribute for his retirement.

During the last Presidential campaign they laughed at Barry Goldwater when he suggested that the Social Security program might be better if it were voluntary. They had TV commercials showing somebody tearing up your Social Security card. Awful! they said.

But if they tore up your Social Security card, and you invested the money you've been forced to pay

for it, you would be at least twice as well off!

It's something to think about, isn't it?

(The second column will appear next month.)—*The Indianapolis Star*, March 19, 1967.

Indiana Shirks Responsibility

The full impact of the disservice done to Indiana residents by Gov. Roger D. Branigin when he vetoed the "blue ribbon" medical school authority is put in perspective by a set of statistics just published by the Assn. of American Medical Colleges.

Its report showed that approximately 11,000 doctors a year are required to meet the need for physicians in the United States. But only 7,574 were graduated last year from America's medical schools.

Another 1,500 come to the United States annually from foreign medical schools, the association observed. But that still leaves the flow of new doctors into the country's bloodstream dangerously constricted, and it does not account for an offsetting number of American-trained doctors who are foreign nationals and who go home to practice.

Needless to say, Indiana—with one medical school—is one of the chief states which fails to turn out a fair proportion of medical men.

Those in our state who claim that there is no point in Indiana training more doctors because many of them will go elsewhere to practice are guilty of conveniently overlooking Indiana's failure to do its part in feeding the national medical pool.

But for the governor's pocket-veto of the blue-ribbon authority which the 1967 General Assembly tried to create to pick a site for a second state medical school, our state would now be on its way to living up to its obligations.—*The South Bend Tribune*, March 21, 1967.

An "Unfunny" Childhood Disease

The Fort Wayne Medical Society which next week will join in the observance of "End Measles Week," asks us to stop thinking of measles ("red measles" or rubeola) as a "slightly humorous" childhood disease.

As we think of it, it was not so many years ago when all of the "childhood diseases" save the few most violent, such as scarlet fever and infantile paralysis, carried a humorous connotation. And while it well may be that we and our parents did not fully realize the possible tragic consequences of those diseases, the "humor" we took from them stemmed not so much from ignorance as from their inevitability.

Certainly, our mothers knew that measles were "serious" and could involve more serious complications. Why else did the shades remain



Vacation trip....

Motion sickness?



This time it'll be different. Emetrol taken before the trip begins will usually prevent nausea and vomiting. Emetrol is effective and safe...most helpful where safety is most important. It acts locally—not systemically.

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Emetrol®
phosphorated carbohydrate solution
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drawn as the disease ran its course? Why else were we confined to bed long after the discomfort had disappeared and we were honing to be at the ball diamond.

But Man, somehow, is inclined to see his confrontation with fate in a humorous light — so, at the same time he complains, he jokes about the inevitability of taxes, and even death. It is the sentiment that, if there is nothing you can do about it, you might as well laugh at it!

The medical society's point is well taken in that, since something can be done about measles, there is no reason remaining to make light of the disease or to put out of mind the crippling and even fatal consequences it can have. New vaccines administered in areawide campaigns, can all but eliminate the disease, and its terrible consequences — deafness, mental defects, and fatalities — can be avoided. The vaccines have been proven safe and effective. Perhaps the best of the measles story is that susceptibility is limited to a relatively narrow age span, which makes it easy to reach the children of school and pre-school age which are its potential victims.

Physicians here believe measles can be eliminated as a major health threat within the very short period of a year, and we join them in the conviction that "it should be."

If the parents of school-age children accept their judgment, the week ahead can be made a memorable period in the county's history, comparable, in a sense, to that of the mass polio immunizations which were undertaken several years ago and which have saved the community so much tragedy and heartache.—*Fort Wayne News-Sentinel*, March 23, 1967.

Measles Conquest Advances

As Dr. Joseph G. Molner reminds the readers of his health column on this page, measles vaccine is beginning to stamp out that disease. The vaccine has been available for about four years with the result that the number of cases reported annually in the United States has fallen off to around half of the 400,000 cases reported as recently as 1961.

The very fact that the vaccine is effective makes it disappointing to public officials that greater strides have not been made toward eradication.

Dr. William H. Stewart, surgeon general of the U.S. Public Health Service, is convinced that measles "could be eradicated" as thoroughly as diphtheria, smallpox and polio in the next year if an intensive immunization plan were put into effect.

Dr. H. Bruce Hull, of the national Communicable Disease Center in Atlanta, told the American Public Health Assn. last fall that the immunization level in the United States could be raised easily to as much as 95%. This would require the vaccination of between eight and 10 million children this year and four million in each succeeding year.

Now, at last, the federal government will marshall the forces for a major thrust to push measles into the ranks of the conquered diseases, supplying $3 million for vaccine.

Perhaps it is because measles never generated the fear that polio, smallpox and diphtheria once did that the big campaign has been late in developing. Yet for an unfortunate few measles meant death or mental retardation. The government-backed vaccination campaign comes as a blessing.—*Bedford Times-Mail*, March 29, 1967.

AMA Beginning To See Light on Medicare

The American Medical Association's long record of resistance to change in the field of medical economics makes its position on Medicare subject to a certain skepticism. The AMA's views, as set forth by its president, Dr. Charles L. Hudson, in testimony before a committee of the House nevertheless deserve thoughtful attention.

Dr. Hudson has shown a greater inclination than most of his predecessors to offer leadership in formulating medical payment law, rather than adamant opposition. He and his associates should be encouraged in this sounder course—sounder with respect to both the medical profession and to the general public interest.

Dr. Hudson told Congress the AMA still believes Medicare "is unwise legislation and is not in the public interest." But there was nothing new in the points he offered in support of this view—that it centralizes direction in Washington and "covers millions of people who are self-supporting."

The same could be said about the Social Security System itself, which has long since won popular support through almost the entire political spectrum. A program affecting the entire nation must have central direction. Anything less than general coverage would involve a means test, which undermines the basic Social Security concept of insurance, not a dole.

The AMA spokesman's testimony on some points were more positive. He did endorse a proposal that patients be allowed to collect from Medicare on the basis of an itemized rather than a receipted bill, properly noting that having to pay the doctor before being reimbursed works hardship on many patients. Though the AMA remains generally negative in its approach, there are small but welcome signs that it is beginning to appreciate the patient's viewpoint on medical economics and may in time offer constructive suggestions. That is an important step forward.—*The Evansville Courier*, April 8, 1967.

The AMA On Medicare

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Continued



"When I couldn't even smell corned beef and cabbage,
I decided it was time for you, Doc."

Maybe he doesn't know when he's well off. But you might want to prescribe long-acting Novahistine LP anyway.

Two tablets in the morning and two in the evening will usually provide day and night relief by helping to clear congested air passages for normal, free breathing. Novahistine LP is formulated to provide continuous therapeutic effect for 8 to 12 hours. The decongestant ingredients help restore normal mucus secretion and ciliary activity—physiologic defenses against infection of the respiratory tract.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

FOURTH ESTATE

Continued

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Continued

Tandearil®

oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic joints move again



3 out of 4 osteoarthritics completely or markedly improved

Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964.	76.9% of 407 patients
Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966.	84.6% of 39 patients

Please see adjoining page for brief prescribing summary

TA-4919 PC

Why these 7 patients with moderate to severe anxiety may respond better to Mellaril



1. The agitated patient.
Anxiety—particularly that beyond the range of minor tranquilizers—frequently is expressed as gross motor restlessness, fidgetiness and purposeless movements, and may erupt into aggressive behavior. Mellaril is almost a specific for those patients whose anxiety follows such a pattern



2. The psychosomatic patient.

The family physician is rarely given the diagnostic luxury of a classic, textbook "anxiety state." Most often he must probe for anxiety masked by a functional disorder—or which exacerbates a somatic problem. Double-blind evaluations have demonstrated that Mellaril can be a significant adjunct in the treatment of such patients.



3. The patient under situational stress.

Mellaril helps the patient deal with stresses of everyday life. Nonhabituating, it can be given for extended periods of time. It does not "separate" the patient from practical problems and pressures, does not induce euphoria or a fuzziness which can compromise the ability to cope with realities. Rather, it helps the patient move more competently in his daily world by eliminating useless tension, by allowing him to conserve emotional resources and energies, and to direct them against the problems really worth worrying about.



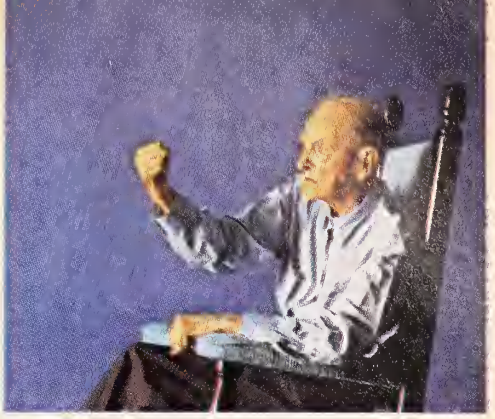
4. The menopausal patient.

The woman who sees change of life as the end of useful life requires support from both family and family physician. Whether the psychological impact of menopause is directly related to hormonal changes, or merely coincidental, is debatable, but estrogenic therapy is frequently inadequate. Mellaril is a useful aid for these patients and, alone, or in combination with reduced estrogen dosage, will help ease the menopausal misery.



5. The previously hospitalized psychiatric patient.

Such a patient may still require the type of medication he has been accustomed to, but because he is no longer in a controlled setting the acceptable level of adverse reactions must be lower. In such circumstances Mellaril is perhaps the drug of choice.



6. The agitated geriatric.

Tranquilizer therapy in the elderly patient always involves special (or at least accentuated) problems: the possibility of drug-induced ataxia, hypotension or depression, for example, assumes an additional significance. These reactions have rarely been observed in geriatric patients treated with Mellaril.



7. The constantly returning patient.

The anxiety patient who has not responded to a minor tranquilizer is not very likely to benefit from your minor tranquilizer of second choice. A major tranquilizer, such as Mellaril, may be indicated in such patients.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.

Before prescribing, see package insert for full product information.

in moderate to severe anxiety, 25 mg. t.i.d.

Mellaril®
(thioridazine)

SANDOZ


Bartholin's gland
Periurethral glands
Cervical glands
Flagyl®.....
brand of
metronidazole
Seminal vesicles
Bladder
Prostate gland

Destroys
Trichomonads
Wherever
They Are

Flagyl seeks out the sites where trichomonads hide. Only a systemic agent can. Flagyl does, selectively and effectively.

Flagyl destroys trichomonads in the inner crypts, glands and cavities of the genitourinary tract in both women and men. Consequently, Flagyl is capable not only of curing trichomoniasis in women but also of preventing reinfection.

Correctly used, with due attention to repeat courses of treatment for resistant, deep-seated invasion and to the presumption of reinfection from male consorts, Flagyl has repeatedly produced up to 100 per cent cure in large series of patients.

When the diagnosis of trichomoniasis is positive, Flagyl is positive.

Dosage and Administration – In *women:* one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.
In *men* in whom trichomonads have been demonstrated: one 250-mg. oral tablet twice daily for ten days.

Contraindications – Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution–Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects–Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

SEARLE *Research in the Service of Medicine*

Did Dorothy Larson show you her ankles in private? Now she shows them in public.

Your office examination would have confirmed that Mrs. Larson was up to her knees in edema. Her heart was beginning to fail. And her ankles had disappeared under an inch of salty water.

Along with digitalis, you might have prescribed Hygroton. To get rid of the edema. And to keep it from coming back. And you prescribe Hygroton the same way you usually prescribe digitalis: just once a day.

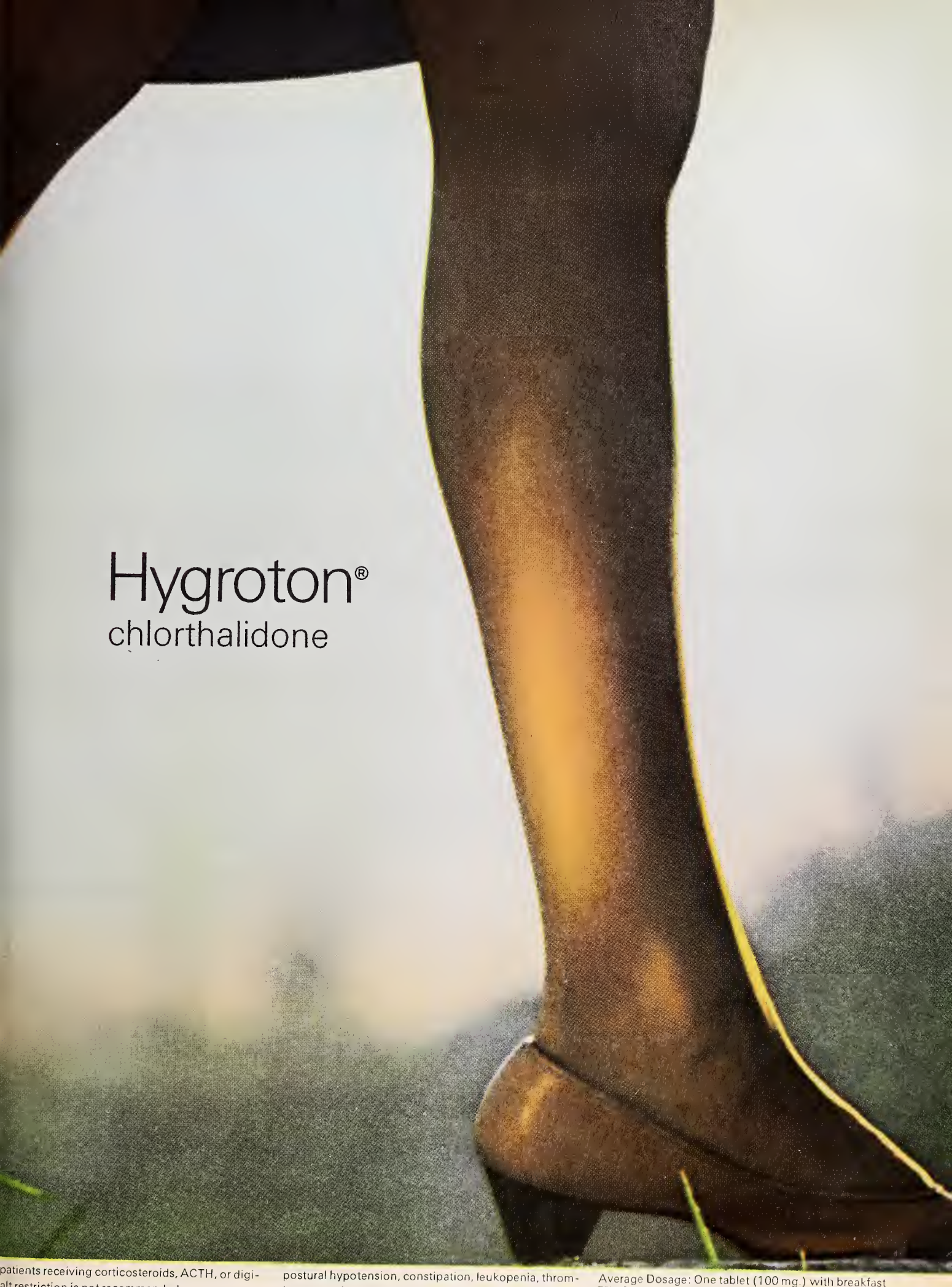
Tablet for tablet, Hygroton is just about the most effective diuretic going. And it costs a fraction of what Mrs. Larson would have to spend for equivalent therapy with short-acting diuretics.

In fact, Hygroton is an awfully nice way to treat the Mrs. Larsons in your practice. Just tell them you can get their ankles back at half price.



Indications: Hypertension and many types of edema involving retention of salt and water.
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Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.
Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if t
BUN rises or liver dysfunction is aggravated. Electr
imbalance and potassium depletion may occur; tak
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Better Care

An area of medical care that has received too little attention is due for "a vast upgrading," according to a release from the American Medical Association. That area is emergency care. The release goes on to point out that "A soldier wounded in the jungle of Vietnam often gets quicker, more comprehensive emergency care than an accident victim on the open highway or a farmer stricken by a heart attack." The emergency care situation has become urgent for the simple reason that hospital emergency room visits have risen 175% in a 10-year period. And this drastic increase has not been matched by a commensurate increase in emergency services.

The AMA has called together a panel of experts to help organize a national conference that will study and recommend means for improving emergency care. The conference will study such matters as ambulance service and ambulance personnel, the staffing and equipping of hospital emergency facilities, improved medical education in emergency procedures, and further research into the causes and prevention of medical emergencies. The action of the AMA is in keeping with fundamental precepts of the medical profession in the United States.

These precepts have but one goal—the preservation and lengthening of human life through the attainment of the highest possible standards of medical excellence. Improvement of emergency care is a logical development, but one that the public should not take for granted any more than it should take for granted the generally high standards of our medical profession.—*Hartford City News-Times*, Feb. 14, 1967. ◄



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The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 60 — June 1967 — Number 6

The three venomous snakes native to Indiana are described. The modern treatment of dangerous snake bites is discussed.

Venomous Snakes of Indiana: Treatment of Their Bites

HENRY M. PARRISH, M.D.*
Columbia, Missouri

BITES by venomous snakes are not uncommon in Indiana. Of states in the east north central region of the United States, Indiana has the highest annual incidence of venomous snakebites.[1] The annual rates of bites per 100,000 population for states in this region are: Indiana (0.97), Michigan (0.74), Ohio (0.46), Wisconsin (0.38) and Illinois (0.35). Moreover, Indiana has the 19th highest annual incidence of copperhead bites in the United States and the 13th highest incidence of rattlesnake bites for states in the eastern United States.[2,3] The purposes of this report are: to acquaint physicians with the venomous snakes of Indiana, to describe the epidemiology of snakebites in the state and to review current concepts of treatment for snakebite.

Venomous Snakes

There are three species or subspecies of venomous snakes indigenous to Indiana: the timber rattlesnake (*Crotalus horridus horridus*); the eastern massasauga (*Sistrurus catenatus catenatus*); and the northern copperhead (*Ancistrodon contortrix mokeson*). Cottonmouths and coral snakes are not native to the state.

The timber rattlesnake is the largest and most dangerous snake found in Indiana. Large adult male specimens measure about 50 inches in length, although record specimens measuring just in excess of six feet have been reported.[4] The average yield of venom is 139 mg. This snake has dark V-shaped cross bands or chevrons on its back. The body color of the timber rattler varies from yellow to black (Figure 1). They are commonly called the "banded rattlesnake." The timber rattlesnake's favorite habitats are hills and mountainous areas with their surrounding rocky ledges and wooded areas. The range for this snake is the southern one-third of Indiana.

The eastern massasauga is a small rattlesnake which has a relatively short tail and moderately small rattles (Figure 2). A large adult male specimen is about 34 inches in length, with a record length of 38 inches.[4] They



FIGURE 1
TIMBER rattlesnake (courtesy L. M. Klauber[4]).

* Professor and Chairman, Department of Community Health and Medical Practice, University of Missouri School of Medicine, Columbia, Mo. 65201.

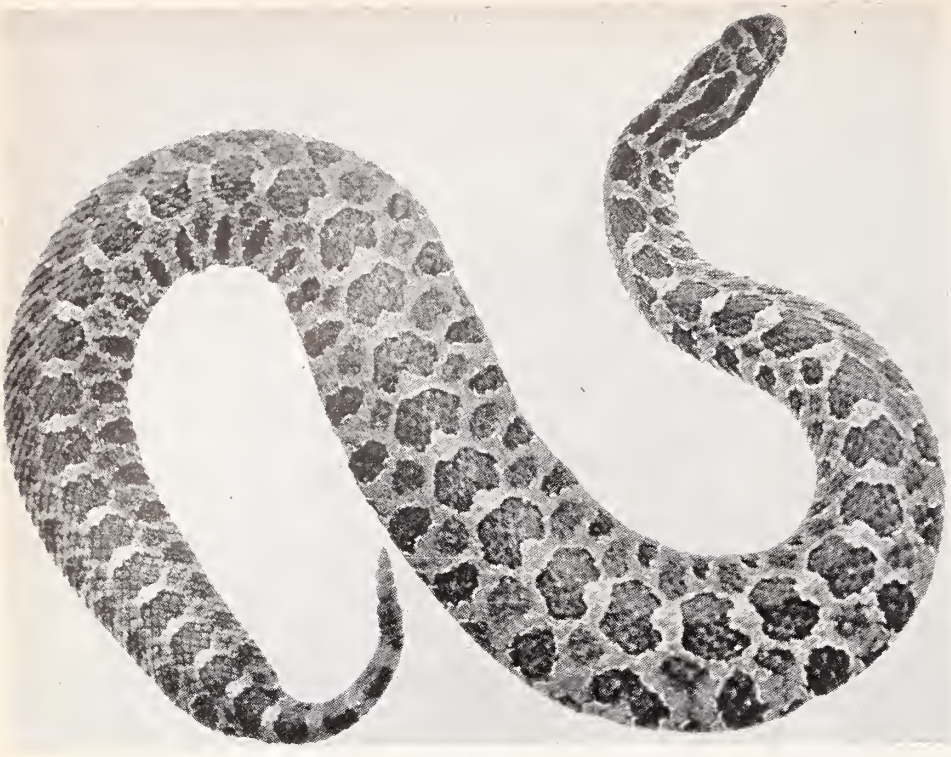


FIGURE 2
EASTERN massasauga (courtesy of L. M. Klauber[4]).

produce a small average amount of venom (31 mg.), however mg. for mg., their venom is more toxic than that of timber rattlesnakes. Although rare, deaths have resulted from bites by massasaugas. They are commonly called "swamp rattlers" or "black snappers." Massasaugas have large black or brown blotches on their sides and the background color varies from grayish-brown to black. The habitats of the massasauga are prairies, swamps, bogs, meadows and hayfields. The range for this snake is the northern two-thirds of Indiana.

The northern copperhead is so named because of its coppery-red head. Also, it is commonly called the "dry-land moccasin," "highland moccasin," "chunkhead," "pilot snake" and "poplar leaf snake." The average adult copperhead is 24 to 36 inches long. It has a large, coppery-red head, a moderately thick body, reddish-brown hourglass markings on the sides of its body, and a tail ending in a point, without rattles (Figure 3). A young copperhead's tail may have a yellow tip. This snake's favorite haunts include mountains, wooded hillsides, rock piles, rock quarries and sawdust piles. It is not unusual for copperheads to reside within city limits and near suburban housing developments. Although rare, deaths have resulted from bites by copperheads. Its range is the southern one-half of Indiana.

How can one distinguish a venomous snake from a harmless snake in Indiana? All of Indiana's venomous snakes are pit vipers, i.e., they have a pit located between the eye and the nostril on each side of the head. Also, they have elliptical pupils and two well-developed fangs which protrude from their maxillae. Rattlesnakes have rattles attached to their tails. Pit vipers have a single row of subcaudal plates just below the anal plate on the underside of their bodies.

Harmless snakes do not have facial pits, they have round pupils, and they have small teeth but no fangs. The underside of a harmless snake's belly shows a double row of subcaudal plates (Figure 4).

Epidemiology

The epidemiology of venomous snakebites in Indiana has been reported in detail elsewhere.[1] Only facts of interest to physicians are summarized here. It was estimated that 45 people are treated annually for snakebites in Indiana. The geographical distribution of these bites may be seen in Figure 5. Most snakebite accidents happened in the southern one-half of the state. The bite by a foreign snake happened in Indianapolis when a laborer was unloading bananas from Costa Rica. Ninety-five percent of the bites happened from May through September and were rather evenly distributed

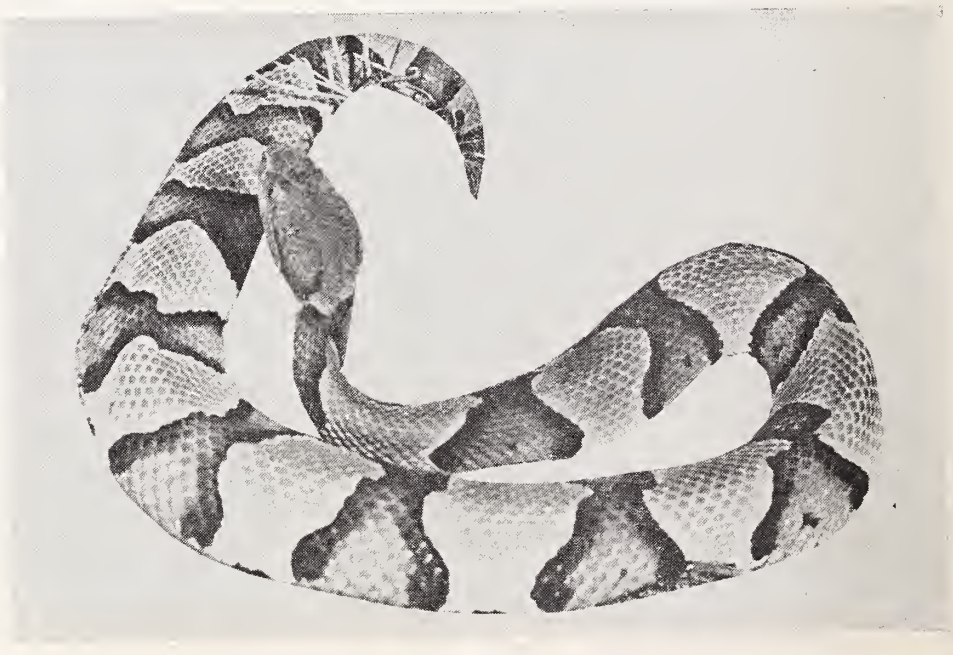


FIGURE 3
COPPERHEAD.

throughout the day from 6:00 a.m. to 8:59 p.m.

Males were bitten more frequently than females and 47% of the victims were children and young adults less than 20 years of age. All of the bites were inflicted on the victims' extremities: 53% on the upper and 47% on the lower extremities. Nineteen percent of the bites resulted in no venenation, 37% in minimal venenation, 31% in moderate venenation and 13% in severe venenation. It is possible for a venomous snake to bite a person without injecting enough venom to produce signs and symptoms of venenation.[2,3] No deaths were reported in this series of patients.

However, Minton[5,6] reported on four snakebite deaths which occurred in Indiana from 1930 through 1949. There have been no snakebite deaths in Indiana from 1950 through 1964. The case-fatality rate for venomous snakebites in Indiana is less than one-tenth of one percent. The paradox of a moderately high incidence of snakebites with a low case-fatality rate in Indiana can be attributed to a high percentage of copperhead and massasauga bites and a low percentage of bites by timber rattlesnakes, to the prompt availability of medical care and to the effectiveness of modern snakebite treatment.[1]

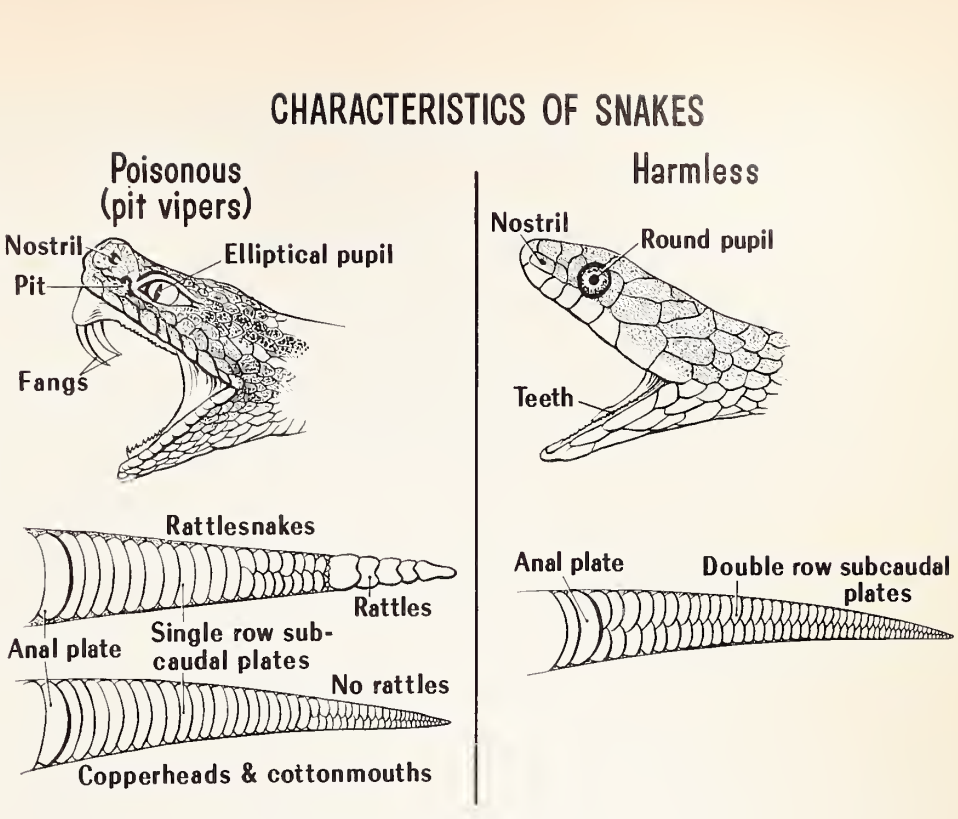


FIGURE 4
COMPARISON of features of pit vipers with those of harmless snakes.

Recommended Treatment

The following treatment is currently recommended for treating venenations by North American pit vipers (rattlesnakes, cottonmouths and copperheads). A constricting band (tourniquet) should be applied lightly to the involved extremity several inches proximal to the bite. The constricting band should be applied only tight enough to occlude the superficial venous and lymphatic flow. *It should not occlude the arterial circulation,* and it should be released every 10 to 15 minutes for a minute or two.

As edema resulting from venom poisoning spreads, the constricting band should be advanced to keep just ahead of the swelling. The purpose of the constricting band is to impede the spread of venom until incision and suction can be used to remove the venom mechanically and/or until antivenin can be administered to neutralize the venom.

Incision and suction (I.S.) is effective in removing venom from experimental animals up to about 120 minutes after the venom is injected. The sooner it is used, the larger the amount of venom that can be removed. Suction should be used for about one hour. Incisions, one-quarter inch long and one-eighth to one-quarter inch deep, are made into the subcutaneous tissues over the fang punctures. Immobilization aids

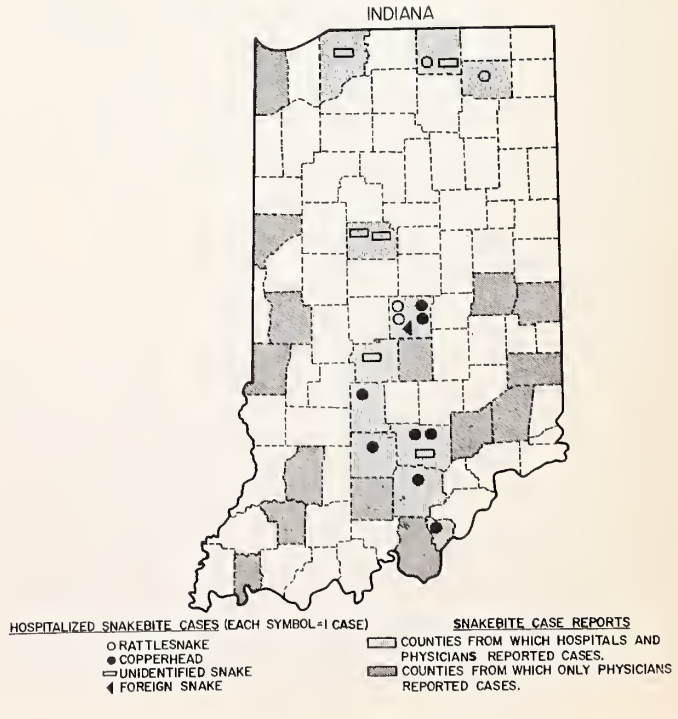


FIGURE 5
GEOGRAPHICAL distribution of bites by venomous snakes in Indiana, 1958 and 1959.

in limiting the spread of venom. However, if one must decide between immobilization or seeking prompt medical treatment, the latter should be sought.

The "3 A's" (antivenin, antibiotics and antitetanus prophylaxis) are recommended, in addition to I.S., in treating all serious pit viper bites. Antivenin manufactured in this country is effective in neutralizing the venoms of all North American pit vipers. Since antivenin is produced from horse serum, the patient should receive a skin test before antivenin is given. Antivenin diluted in 500 ml. of normal saline may be given intravenously.[7]

Studies with radioisotopes have shown that antivenin accumulates at the site of the bite more rapidly after intravenous administration than after intramuscular administration.[8] I have found the following amounts of antivenin useful in treating the various grades of venenation: Grade 0 (no venenation) requires no antivenin; Grade I (minimal venenation) may require 10 ml. (one ampoule) of antivenin; Grade II (moderate venenation) requires 30 to 40 ml. of antivenin; and Grade III (severe venenation) requires 50 to 100 ml. or more of antivenin.

Since snakes' mouths and venoms may harbor pathogenic organisms, antibiotics and tetanus toxoid or tetanus immune globulin should be given prophylactically. Gram-negative organisms predominate, hence a broad spectrum antibiotic is indicated.

Corticosteroids and ACTH do not affect the survival rate of animals poisoned with pit viper venoms. They probably should not be used during the first few days after venenation, although they may be beneficial later in treating serum sickness resulting from antivenin therapy. Antihistamines are contraindicated as they shorten the survival time of animals poisoned with pit viper venoms. Shock resulting from venom poisoning should be treated with infusions of blood, plasma, saline solution and vasopressor drugs. Analgesics are needed to relieve pain. Recently there have been reports of excessive local tissue necrosis and amputations associated with cold therapy such as packing an extremity in ice or ice water or using ethyl chloride.[9,10,11] In my opinion, cold therapy should not be used in treating pit viper venenations.

Summary

There are three species or subspecies of venomous snakes in Indiana: the timber rattlesnake, the eastern massasauga and the northern copperhead. All of these snakes are pit vipers. An estimated 45 persons are bitten by venomous snakes annually in Indiana, however the case fatality rate is low (0.1%). Ninety-five percent of the bites happen from May through September. Almost all of the bites are inflicted on the victims' extremities. The currently recommended treatment for pit viper venenations is a constricting band with incision and suction, the "3 A's" (antivenin, antibiotics and antitetanus prophylaxis) and general supportive measures.

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Fewer New Drugs Introduced

THE United States established a new pharmaceutical record in 1966—fewer new medicines were introduced in 1966 than in any of the previous 18 years for which accurate statistics are available.

Only 80 prescription drug products were introduced last year. This is down from 112 products new to the market in 1965. In the past ten years, the number of new medicines approved by the FDA for marketing has declined 80%.

The term "new drug products" includes single chemical agents, duplicates of existing products such as meprobamate which is put out by several companies, combinations of existing products and new dosage forms.

As an indication of progress, the number of new single chemical agents is most significant. This important class shows the sharpest decline, down to 12 in 1966 after a high of 63 in 1959.

As compared with the four large nations of western Europe, the U.S. was in fifth place last year in the introduction of new single agents. Germany, France, Italy, Great Britain and the United States scored respectively 42, 34, 21, 20 and 12. One-third of all these drugs were developed by American scientists.

The Drug Information Service of Paul de Haen, Inc., reports on the above statistics and emphasizes that during 1966, the American drug industry marketed seven new single chemical agents in Europe, none of which was available to physicians in the United States in 1966, although two of them were approved in January of this year.

The pharmaceutical decline was not limited to products but included pharmaceutical firms which introduced new products. In 1957, 127 American companies had new medicines approved for the market; in 1966 there were only 66. de Haen comments that the increased cost of research and the longer and more expensive clinical research involved may be eliminating the smaller drug houses as researchers.

Attacking the Old Grouch

AS you will recall, last month's episode concerned a proposal by the old grouch to decrease the total number of residency positions in this country from 39,000 to 10,000. He argued that this would raise the quality of both general practitioners and specialists as well as reversing the specialist-general practitioner ratio, which is presently top-heavy.

This proposal can be attacked on a number of fronts, as follows:

1. It would deny fledgling physicians a complete freedom of choice to enter whatever field of specialization might strike their fancy. Many young men would perforce have to enter general practice. If the present trends in society are that no one should be deprived of anything, then this proposal is certainly a reactionary one. In short, the proposal is cruel and retroversive.
2. The plan is dictatorial. It would establish residency quotas by fiat. It is undemocratic and the Council on Medical Education of the American Medical Association would never act in such a way.
3. Community hospitals would never stand for it. Too many of these institutions have come to depend on the resident staffs for histories and physicals, etc. The proposal would have the effect of centering residency programs in university medical centers.
4. University medical center departmental chairmen would raise a cry the likes of which has never been heard. An entire cloister of seven research

fellows in gastroenterology might be wiped out with the result that the staff gastroenterologist would have to run the G.I. Clinic himself. This would certainly raise havoc with the plans to obtain future grants.

In summary, it seems as if the old grouch has managed to do something that is rather rare nowadays: he has made a proposal that offends almost everyone. Medical students, house officers, community hospital physicians, medical school faculty, organized medicine, and the ACLU can all have a field day with assaults on it.

Our friend has only one defense basically, and that is "The proposal will work." He assures me that he will present his defense next month in "The Old Grouch Fights Back."—J.W.H. ◄

Art, Hobby Show Planned For ISMA Indianapolis Meeting

Space will be provided at the 1967 annual meeting of the Indiana State Medical Association, Oct. 9-12 at Indianapolis for a Physicians Art and Hobby Show.

Members of ISMA interested in exhibiting pieces and requiring any information regarding this can contact any one of the following:

Dr. Charles P. Schneider
2211 W. Franklin St.
Evansville

Dr. Ray H. Burnikel
517 Sycamore St.
Evansville

Dr. Truman E. Caylor
303 S. Main St.
Bluffton

Dr. Frank H. Coble
51 S. Eighth Street
Richmond

Dr. Lall G. Montgomery
Ball Memorial Hospital
Muncie

ISMA Headquarters
3935 N. Meridian
Indianapolis

It will be the responsibility of each physician to see that his work gets to the exhibition at the Murat Temple. Final arrangements will be taken care of by Drs. Schneider and Burnikel, co-chairmen.

The ISMA will provide suitable display facilities, but each physician is responsible for transportation costs and any other such expense involved in entering his exhibit.

We solicit your exhibit to make this the largest and best ever this year.

Application for Space in Art and Hobby Show Exhibit

Mail to:

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2211 W. Franklin St.
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Type and number of pieces to be displayed: Photography_____

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Crafts_____

Painting_____

Other_____

Estimated amount of space required—lineal or square feet_____

Other information_____

President's Page

Dear Doctor:

This President's Page for the June issue is being written in the middle of May. The June issue as you know is a large issue and must go to press early. However, it does become a bit difficult to write a page which will come out after the AMA Convention and still be current. One cannot forsee that which happens in advance.



I have had the privilege of attending the Wisconsin State Medical Association meetings May 8 through May 11, 1967. I find our neighboring states have the same problems that you and I have. It is quite interesting to watch someone else bicker over similar problems. It is also interesting to note that the solutions to these problems are usually about the same. It will be my privilege to attend the Ohio State Annual Convention from May 15 through May 19. This will not allow me to attend very many, if any district meetings this spring. Something must be done about these district meetings. I hope that your district officers have answered the questionnaire sent to them. This would be a great help to us. I shall also go to Washington with the AMPAC group on June 2, 3 and 4. These meetings will all be reported to the Council in July of 1967.

Last month I wrote what I believed to be a thought-provoking article for the President's Page. This was not done to advocate a certain line of reasoning. This was done to provoke thought. As yet, it is too early to have received replies. I really expect the mail to be somewhat hot and heavy after many of you have read that President's Page. But, I do believe that organized medicine must come forward with progressive ideas to solve the problems of health in America, or the free practice of medicine, as you and I understand it, will soon be no more. We can no longer hide our heads in the sand and state that no problems exist. We must note the problems and we must find solutions to them. Those who have the problems or who are concerned with these problems will do their utmost to get them solved. If they cannot do this within the framework of free enterprise, they will do it under government.

Certainly, organized medicine should have learned its lesson from the evolvement of Medicare. I know that the minds of the physicians of America are capable of solving these problems. I realize that many of you have excellent ideas concerning their solution. I would urge each of you to send to his councilor and/or the president, those health care problems which you see facing us in the future and the solutions which you feel can be used. This will give the officials of your state organization a sound basis of understanding your ideas. Your thoughts generated by your experience in daily practice should prove most beneficial in uncovering any problems and providing a sound basis for arriving at solutions, in keeping with the attitudes of Indiana physicians.

Again I would ask each county to send in its resolutions for the fall meeting. The state office will inform your secretary-treasurer of the latest date that these may be turned in. I believe this to be in August. This would give us plenty of time for deliberation and excellent resolutions before our House of Delegates in October of 1967.

Eugene S. Kiefer M.D.

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The Woman's Auxiliary

REPORTS TO ISMA

Our 23rd annual House of Delegates meeting was held at the Ramada Inn, Evansville in April. One hundred and eighty ladies registered at this meeting, which meant that there were many doctors throughout the state who were eating soup and sandwiches at home alone (my husband included).



The ladies from Vanderburgh Southwestern worked long hours planning the meeting. It was well organized and the atmosphere was filled with warmth and Hoosier hospitality. Other hostess auxiliaries were Clark, Gibson and Dubois counties. The theme "Springtime in River City" was carried out throughout the meeting.

Tuesday night the "Welcome Aboard" dinner was held; this was just for fun. Wednesday morning our House of Delegates officially opened—we "hit the deck" at 7:45 a.m., when we attended our continental breakfast. From this point we were constantly busy until the close of our meetings Thursday afternoon.

We were honored by the presence of our National Auxiliary President Mrs. Asher Yaguda. I am sure that Mrs. Yaguda had a most unusual experience when she spoke to the delegates at a luncheon aboard the riverboat "Chaperon", while we were cruising on the Ohio river. We also heard many wonderful reports from our county presidents.

Wednesday night our banquet room resembled a fairyland. All of the ladies looked so beautiful amid the lovely floral arrangements. We were honored to have as our guests Drs. Eugene Rifner, and G. O. Larson, the president and president-elect of ISMA; Lowell Steen, M.D., chairman of the Council; Joseph Lawrence, M.D., president of the Vanderburgh S.W. Medical Society and Mr. James Waggener, executive secretary of the ISMA. We appreciate the interest and the presence of these very busy men.

Also attending as guests were the president and presidents-elect of the Wisconsin and Michigan State medical auxiliaries. We welcome the sharing of ideas with other states.

The fellowship we shared, the interchange of ideas and the excellent reports made this a wonderful meeting.

Roberta P. Deever

There are 50,200* undetected diabetics in Indiana

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F. W. McDowell, M.D.*	General Surgeon	District 8
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M. F. Miller, M.D.* (Vice Chairman of the Board)	Ob-Gyn	District 12
Robert W. Vermilya, M.D.	Anesthesia	District 9
George W. Willison, M.D.	Internal Medicine	District 1
Term Expires March, 1969:		
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C. Philip Fox, M.D.	General Surgeon	District 2
Maurice Glock, M.D.	Internal Medicine	At Large
Frank Green, M.D.	General Surgeon	District 6
John M. Paris, M.D.	General Practice	District 3
Bernard D. Rosenak, M.D.*	Internal Medicine	At Large
Lowell I. Thomas, M.D.* (Secretary)	Orthopedic Surgeon	At Large
Term Expires March, 1970:		
William E. Bayley, M.D.	Pathology	At Large
John W. Beeler, M.D.*	Radiology	At Large
Joe M. Black, M.D.	General Practice	District 4
Edward Dovey, M.D.	Urologist	District 13
M. B. Gevirtz, M.D.	General Surgeon	District 10
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Brown County Nursing Service
Brown County Health Department
Court House Annex
Nashville

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Court House
English

ELKHART COUNTY

Elkhart County Health Unit
313 N. Second St.
Elkhart

FULTON COUNTY

Fulton County Health Dept.
Courthouse
Rochester

JACKSON COUNTY

Home Health Care Division
Jackson County Dept. of Health
Jackson County Hospital
Poplar & Bruce Streets
Seymour

JEFFERSON COUNTY

Jefferson County Health Department
Home Health Division
Madison

JOHNSON COUNTY

Johnson County Health Department
Court House
Franklin

LAKE COUNTY

Lake County Health Dept.
Court House
Crown Point
East Chicago Visiting Nurse Assn.
532 W. Chicago Ave.
East Chicago
Combined Public Health Nursing Assn.
1429 Virginia St.
Gary

MARION COUNTY

Visiting Nurse Assn., Inc.
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Indianapolis

MARSHALL COUNTY

Marshall County Health Dept.
Courthouse
Plymouth

MONROE COUNTY

Public Health Nursing Assn. of Bloomington & Monroe County
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Bloomington

ST. JOSEPH COUNTY

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321 Lincolnway West
South Bend

TIPPECANOE COUNTY

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Lafayette

VANDERBURGH COUNTY

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120 S.E. First St.
Evansville

VIGO COUNTY

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Vincennes

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Gary

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Gary

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Gary

Lake County Clinical Laboratory
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Gary

Physicians Laboratory
5231 Hohman
Hammond

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Hobart

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Michigan City

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Indianapolis

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Indianapolis

Mazzini Serodiagnostic Laboratory
513 Hume Mansur Building
Indianapolis

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Indianapolis

Mershon Medical Laboratories
3855 E. 10th St.
Indianapolis

Mershon Medical Laboratories
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Indianapolis

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South Bend

South Bend Medical Foundation
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South Bend

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Lafayette

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3700 Bellemeade Ave.
Evansville

Pathology Service
P.O. Box 624
3700 Bellemeade Ave.
Evansville

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360 S. Madison Ave.
Greenwood

Terre Haute Medical Laboratory
1505 N. Seventh St.
Terre Haute

Valley Medical Laboratory
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Terre Haute

WAYNE COUNTY

Richmond Clinical Pathology Laboratories
100 N. 15th St.
Richmond

Richmond Clinical Pathology Laboratories (No. 2)
1250 Chester Blvd.
Richmond

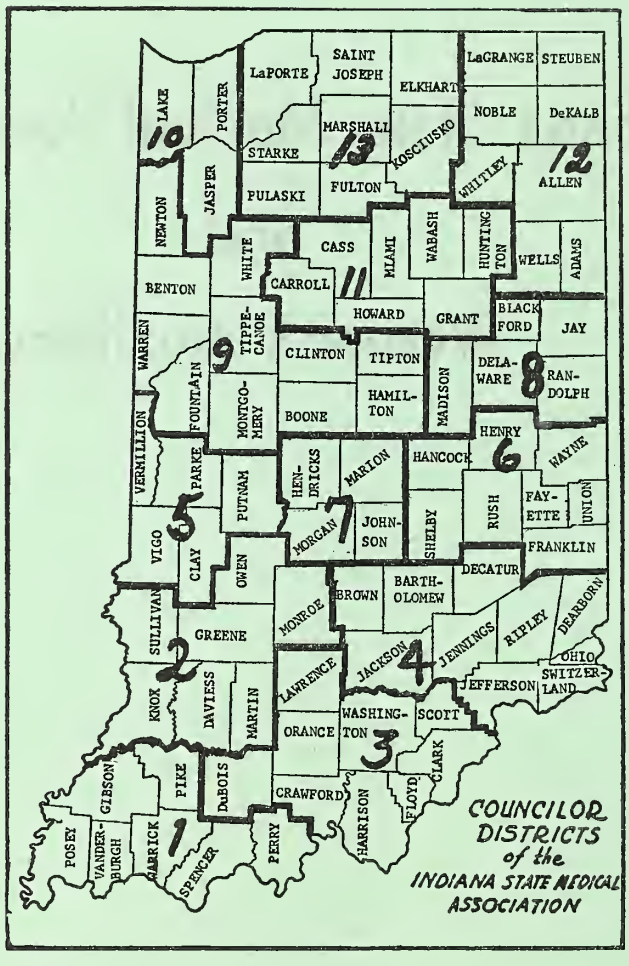
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Membership Roster

INDIANA STATE MEDICAL ASSOCIATION

Following is a list of paid-up members of the Indiana State Medical Association as of May 1, 1967.

The letter (S) following a name indicates that the physician is a senior member of his local society and of the Indiana State Medical Association. The letter (H) following a name indicates that the physician is an honorary member of his local society and the Indiana State Medical Association.

Physicians are listed in the county medical society in which they hold membership.

Names of members who have died during the year do not appear in this list.

If any errors are found in this list, please report them to THE JOURNAL, 3935 N. Meridian, Indianapolis, Indiana 46208. The cooperation of members is urgently requested.

ALPHABETICAL LIST OF MEMBERS

For street addresses, see roster of members by counties, p. 33/713.

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Able, Walter	Columbus	Bartholomew-Brown
Abramson, Allan L.	Gary	Lake
Acher, Robert P.	Greensburg	Decatur
Acker, Herbert K.	Fort Wayne	Allen
Acker, Robert B. (S)	South Bend	St. Joseph
Acre, Robert R. (S)	Evansville	Vanderburgh
Adair, Samuel L.	Jeffersonville	Clark
Adair, William K. (S)	Crothersville	Jackson-Jennings
Adams, Julia L.	Muncie	Delaware-Blackford
Adams, E. Wade	Fort Wayne	Allen
Adams, Max R.	Flora	Carroll
Adams, William B.	Muncie	Delaware-Blackford
Addleman, Robert H.	Indianapolis	Marion
Ade, Charles H.	Lafayette	Tippecanoe
Ade, Mary Keller	Lafayette	Tippecanoe
Adkins, Harold C.	Indianapolis	Marion
Adler, David L.	Columbus	Bartholomew-Brown
Adler, Raymond N.	Evansville	Vanderburgh
Adney, Frank B., Jr.	Richmond	Wayne-Union
Advincula, Luis V.	Greencastle	Clay
Adye, Wallace M., Jr.	Evansville	Vanderburgh
Agana, Adriano A.	Gary	Lake
Ahlbrand, Roland C.	Fort Wayne	Allen
Ahler, Kenneth J.	South Bend	St. Joseph
Aiken, Arthur F.	Fort Wayne	Allen
Aiken, Milo M.	Plainfield	Hendricks
Aiken, Nevin E.	Fort Wayne	Allen
Ake, Loren	Richmond	Wayne-Union
Albertson, Frank P.	Indianapolis	Marion
Albrecht, Willard H.	Indianapolis	Marion
Alcorn, Merritt O.	Madison	Jefferson-Switzerland
Alderfer, Henry H.	Marion	Grant
Aldred, Allen W.	Fort Wayne	Allen
Aldrich, Harry D.	Indianapolis	Marion
Aldrich, Howard	Indianapolis	Marion
Alexander, Ezra D.	Indianapolis	Marion
Alexander, Jack L.	Muncie	Delaware-Blackford
Alexander, John E.	Evansville	Vanderburgh
Alexander, Paul J.	Indianapolis	Marion
Alexander, Stephen J.	Crawfordsville	Montgomery
Alfano, Joseph E.	Hammond	Lake
Alfano, Paul A.	Gary	Lake
Alig, Vincent B.	Indianapolis	Marion
All, Barbara B.	Indianapolis	Marion
Allegretti, Michael L.	Munster	Lake
Allen, Donald R.	Evansville	Marion
Allen, George S.	Georgetown	Floyd
Allen, Lawrence E.	Indianapolis	Marion
Allen, Robert K.	Indianapolis	Marion
Allen, Robert T.	Richmond	Wayne-Union
Allen, William H.	Evansville	Vanderburgh
Alley, Thomas W.	Indianapolis	Marion
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Alt, Edward M., Jr.	Munster	Lake
Althoff, William R.	Kokomo	Howard
Altier, William H.	Lafayette	Benton
Alvarez, Paul	Crown Point	Lake
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Alward, John H.	Kokomo	Howard
Ambrose, Jesse C.	Noblesville	Hamilton
Ambrozaitis, Kazys	Gary	Lake
Amico, Pasquale J.	Gary	Lake
Amos, Robert L.	New Castle	Henry
Anderson, Ernest	Fort Wayne	Allen
Anderson, Garland D.	Fort Wayne	Allen
Anderson, James T.	Greenfield	Hancock
Anderson, James W.	Indianapolis	Marion
Anderson, John B.	Vincennes	Knox
Anderson, John T.	Zionsville	Marion
Anderson, Milton H.	Evansville	Vanderburgh
Anderson, Richard M.	Vincennes	Knox
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Anderson, Walter C.	Terre Haute	Vigo
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Angel, Virgil E.	Highland	Lake
Angeles, Uldarico A.	Gary	Lake
Angulo, Edilberto D.	Munster	Lake
Ansbacher, Stefan (H)	Marion	Grant
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Antreasian, Berj	Indianapolis	Marion
Appel, Richard H.	Indianapolis	Marion
Apple, Eddie R.	Salem	Washington
Applegate, Albert E.	Frankfort	Clinton

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Arata, Justin E.	Fort Wayne	Allen
Arata, Lucian A.	Shelbyville	Shelby
Arbeiter, Herbert I.	Munster	Lake
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Arbogast, Paul B.	Vincennes	Knox
Arbuckle, William E. (S)	Indianapolis	Marion
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Arford, John E.	Warsaw	Kosciusko
Arlook, Theodore D.	Elkhart	Elkhart
Armalavage, Leon J.	Valparaiso	Porter
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Armington, Robert L.	Anderson	Madison
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Bean, Joseph S.	Logansport	Cass
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Benken, Lawrence D.	Muncie	Delaware-Blackford
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Bernoske, Daniel G.	Indianapolis	Marion
Berry, John M.	Indianapolis	Marion
Best, Robert C.	Whiting	Lake
Bethea, Dennis A. (S)	Hammond	Lake
Bethea, Robert O.	Farmersburg	Sullivan
Beuerman, V. A.	Lafayette	Tippecanoe
Beutler, Theodore V.	Fort Wayne	Allen
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Bibler, Lester D.	Indianapolis	Marion
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Bill, Robert O.	Indianapolis	Marion
Billings, Elmer R.	Elkhart	Elkhart
Billingsley, John S.	Fort Wayne	Allen
Bills, R. James	Gary	Lake
Bills, Robert N. (S)	Gary	Lake
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Birmingham, Peter J. (S)	South Bend	St. Joseph
Birum, Patricia J.	Union City	Randolph
Bishop, Harry A.	Frankton	Madison
Bissonnette, Roger P.	Evansville	Vanderburgh
Bixler, Donald P.	Anderson	Madison
Bixler, James A.	Fort Wayne	Allen
Bixler, Louis C.	South Bend	St. Joseph
Bizer, Mier A.	Jeffersonville	Clark
Black, Boyd K.	Vincennes	Knox
Black, Henry R.	Indianapolis	Marion
Black, M. James	Brownsburg	Hendricks
Black, Joseph M.	Seymour	Jackson-Jennings
Blackburn, Howard R.	Noblesville	Hamilton
Blackford, Florence	Indianapolis	Marion
Blackford, Ralph E. (S)	Indianapolis	Marion
Blackwell, Donald S.	Indianapolis	Marion
Blaisdell, William F.	Seymour	Jackson-Jennings
Blake, Albert L.	Indianapolis	Marion
Bland, Jack D.	Holland	Dubois
Blassaras, Crist A.	Anderson	Madison
Blatt, A. Ebner	Indianapolis	Marion
Blazey, Arthur G.	Washington	Daviess-Martin
Bledsoe, James G.	New Castle	Henry
Blessinger, Louis H.	Corydon	Harrison-Crawford
Blichert, Peter A.	Fort Wayne	Allen
Blix, Fred M.	Ladoga	Montgomery
Bloemker, E. Fredrick	Tucson, Ariz.	Marion
Bloemker, Edward F.	Indianapolis	Marion
Bloom, Asa W.	Marion	Grant
Bloom, George R.	Elkhart	Elkhart
Bloomer, Richard S.	Rockville	Parke-Vermillion
Bloss, Bryant A.	Evansville	Vanderburgh
Blossom, Paul W.	Richmond	Wayne-Union
Blum, Leon L.	Terre Haute	Vigo
Boaz, William D.	Wabash	Wabash
Bobb, Kenneth E.	Seymour	Jackson-Jennings
Bodnar, Leslie M.	South Bend	St. Joseph
Bogan, William C.	South Bend	St. Joseph
Bogardus, Carl R.	Austin	Scott
Boggs, Eugene F.	Indianapolis	Marion
Boha, Rudolf L.	Borden	Floyd
Bohner, Caryle B.	Hidalgo, Mexico	Marion
Bolin, Robert C.	Lafayette	Tippecanoe
Boling, Frederick F.	Indianapolis	Marion
Boling, Grover C.	Indianapolis	Marion
Boling, Richard C.	Elkhart	Elkhart
Bolinger, Garry L.	Indianapolis	Marion
Bollheimed, Don A.	Alexandria, Va.	Allen
Bomalaski, M. Donald	Ft. Leonard Wood, Mo.	Marion
Bomba, Brad J.	Bloomington	Owen-Monroe
Bombar, Leslie E.	Munster	Lake
Bond, George S. (S)	Indianapolis	Marion

Name	City	County
Bond, Virginia	Indianapolis	Marion
Bond, Walter C. (S)	Clay City	Clay
Bond, William H.	Indianapolis	Marion
Bonsett, Charles A.	Indianapolis	Marion
Booher, Norman R.	Indianapolis	Marion
Booher, Olga Bonke	Indianapolis	Marion
Boone, Clarence W.	Gary	Lake
Boone, Robert D.	Evansville	Vanderburgh
Boonstra, Charles E.	Bluffton	Wells
Booth, Boynton H.	Indianapolis	Marion
Booth, Franklin M.	South Bend	St. Joseph
Booze, James H.	Bloomington	Owen-Monroe
Bopp, Henry W., Jr.	Terre Haute	Vigo
Bopp, James	Terre Haute	Vigo
Boren, Paul R.	Poseyville	Posey
Bornstein, Herschel	Gary	Lake
Borland, Raymond M.	Bloomington	Owen-Monroe
Borough, Lester D.	South Bend	St. Joseph
Bosch, Ralph	Seymour	Jackson-Jennings
Bosler, Howard A.	Westville	La Porte
Bossard, John W.	Fort Wayne	Allen
Boswell, Robert W. C.	Evansville	Vanderburgh
Botkin, Charles L. (S)	Muncie	Delaware-Blackford
Botkin, Charles T.	Muncie	Delaware-Blackford
Botkin, Clyde G.	Muncie	Delaware-Blackford
Bowdoin, George E. (S)	Elkhart	Elkhart
Bowen, Gerald T.	Lawrenceburg	Dearborn-Ohio
Bowen, Otis R.	Bremen	Marshall
Bower, Richard E.	Fort Wayne	Allen
Bowers, Charles R.	Anderson	Madison
Bowers, Copeland C.	Kokomo	Howard
Bowers, Gah T.	Fort Wayne	Allen
Bowers, Garvey B.	Kokomo	Howard
Bowers, George W.	Fort Wayne	Allen
Bowers, John A.	Kokomo	Howard
Bowers, Jesse W. (S)	Fort Wayne	Allen
Bowman, Charles M.	Albion	Noble
Bowser, Philip G.	Goshen	Elkhart
Boyce, Paul A.	El Cajon, Calif.	Marion
Boyd, H. Clark	Terre Haute	Vigo
Boyd, Stella N.	Oakland City	Vanderburgh
Boyer, Don W.	Lebanon	Boone
Boyer, Floyd A.	Indianapolis	Marion
Boyer, Grace B.	Marion	Grant
Boylan, Peter C.	Indianapolis	Marion
Boyle, Carroll L.	Evansville	Vanderburgh
Boys, Fay F.	East Chicago	Lake
Boze, Robert L.	Berne	Adams
Bradley, Louis F.	Bluffton	Wells
Bradley, Richard V.	Kokomo	Howard
Brady, Kingdon	Lafayette	Tippecanoe
Brady, Samuel J.	Gary	Lake
Brady, Thomas A.	Indianapolis	Marion
Brakel, Frank J., Jr.	Evansville	Vanderburgh
Branam, George E.	Muncie	Delaware-Blackford
Branco, Arthur M.	Munster	Lake
Brand, Anna	Calumet City, Ill.	Lake
Brandman, Harry	Gary	Lake
Brandt, William E.	Fort Wayne	Allen
Brauer, Abraham A.	Westville	La Porte
Braun, Benjamin D.	East Chicago	Lake
Braunlin, Robert J.	Fort Wayne	Allen
Brayton, John R., Jr.	Pensacola, Fla.	Marion
Brayton, Lee	Indianapolis	Marion
Brechtl, Harvey J.	South Bend	St. Joseph
Breedlove, C. Dane	Fairmount	Grant
Brennan, Bess B.	Hammond	Lake
Brennan, William C.	Whiting	Lake
Brenner, Howard B.	Munster	Lake
Bretz, John M.	Huntingburg	Dubois
Brickley, Harry D.	Indianapolis	Marion
Brickley, Richard A.	Indianapolis	Marion
Bridge, Barton C.	Lafayette	Tippecanoe
Bridges, Alvin L.	Anderson	Madison
Bridges, William L.	Fort Wayne	Allen
Bridwell, Edgar	Bedford	Lawrence
Briggs, Robert W.	Indianapolis	Marion
Brill, Joseph B.	Jeffersonville	Clark
Brillhart, James R.	Indianapolis	Marion
Brincko, John	Gary	Lake
Brink, Calvin C. (S)	Gary	Lake
Bristol, Henry M. S.	Terre Haute	Vigo
Britt, Robert L.	Evansville	Vanderburgh
Britton, Welbon D.	Montezuma	Parke-Vermillion
Brock, Joseph T.	New Castle	Henry
Brockman, Wilfred J.	Corydon	Harrison-Crawford
Brockmole, Arnold W.	Evansville	Vanderburgh
Brodie, Donald W.	Indianapolis	Marion
Bromley, Luman W.	Fort Wayne	Allen
Bronson, Paul J.	Terre Haute	Vigo
Brooks, Edwin A.	Evansville	Vanderburgh
Brooks, Fred R., Jr.	Indianapolis	Marion
Brooks, G. Tanner	Richmond	Wayne-Union
Brooks, Leonard C.	Warsaw	Kosciusko
Broomes, Edward L. C.	East Chicago	Lake
Brose, Paul E.	Indianapolis	Marion
Broshears, Kenneth P.	Linton	Greene
Brosius, Robert H. W.	Fort Wayne	Allen
Brough, A. Kathleen	Indianapolis	Marion
Brown, Archie E.	Indianapolis	Marion
Brown, David E.	Indianapolis	Marion
Brown, DeWitt W.	Indianapolis	Marion
Brown, Earl R., Jr.	Indianapolis	Marion
Brown, Frances T. (S)	Indianapolis	Marion
Brown, Frank M.	Indianapolis	Marion
Brown, Frederic W.	Fort Wayne	Allen
Brown, Garland R.	Fort Wayne	Allen
Brown, George E.	Greenwood	Johnson
Brown, Gordon T.	Indianapolis	Marion
Brown, James C.	Valparaiso	Porter
Brown, John S.	Carlisle	Sullivan
Brown, Kenneth H.	New Albany	Floyd
Brown, Leland G.	Muncie	Delaware-Blackford
Brown, Leo R.	Gary	Lake
Brown, Marcel S.	Spencer	Owen-Monroe
Brown, Richard J.	Kokomo	Howard
Brown, Robert M.	Marion	Grant
Brown, Robert R.	Terre Haute	Vigo
Brown, Stewart D.	Albany	Delaware-Blackford
Brown, Thomas M.	Muncie	Delaware-Blackford
Brown, Wendell E.	Indianapolis	Marion
Browning, James S.	Indianapolis	Marion
Browning, William M.	Nineveh	Marion
Brownley, E. Jane	Indianapolis	Marion
Brubaker, Harold S.	Huntington	Huntington
Brubeck, Robert E.	Martinsville	Morgan
Bruce, Reginald A.	Indianapolis	Marion
Brucker, Perry A.	Fort Wayne	Allen
Brueckmann, F. Robert	Indianapolis	Marion
Bruegge, Theodore J.	Kokomo	Howard
Bruetsch, Walter L. (S)	Santa Barbara, Calif.	Marion
Bruner, Ralph W. (S)	Jeffersonville	Clark
Bryan, Franklin A.	Fort Wayne	Allen
Bryan, Paul E.	Madison	Jefferson-Switzerland
Bryan, Robert E.	Kendallville	Noble
Bryan, Stanton L.	Evansville	Vanderburgh
Bryant, Edward G.	East Chicago	Lake

Name	City	County
Buchanan, Wallace D.	South Bend	St. Joseph
Buche, Frederick P. (S)	Richmond	Wayne-Union
Buchman, Marshall H.	New Albany	Floyd
Buckingham, Richard E.	Bloomington	Owen-Monroe
Buckles, David L.	Anderson	Madison
Buckner, George D.	Fort Wayne	Allen
Buckner, Joy F.	Bluffton	Wells
Buddrus, David J.	Evansville	Vanderburgh
Buehl, Isabelle A.	Indianapolis	Marion
Buehler, George M.	Jeffersonville	Clark
Buechler, William F.	Elwood	Madison
Buechner, Frederick W.	South Bend	St. Joseph
Buehner, Donald F.	Evansville	Vanderburgh
Buell, Forrest R.	Clay City	Clay
Bugh, Charles W.	Fairbanks, Alaska	Marion
Buhrmester, Harry C.	Lafayette	Tippecanoe
Bullers, Robert C.	Franklin	Johnson
Bullington, George E.	Whiteland	Johnson
Bunker, Ladoska Z.	North Manchester	Wabash
Burcham, James B.	Madison	Jefferson-Switzerland
Burdette, Harold F.	Indianapolis	Marion
Burger, Thomas C.	Evansville	Vanderburgh
Burghard, Rolla D.	Indianapolis	Marion
Burk, James M.	Decatur	Adams
Burket, Cecil R.	Bremen	Marshall
Burkhardt, Boyd A.	Tipton	Tipton
Burkhart, Charles A.	Fort Wayne	Allen
Burkle, Robert J.	Terre Haute	Vigo
Burnett, Arthur B.	New Castle	Henry
Burnett, Paul C.	Logansport	Cass
Burnikel, Ray H.	Evansville	Vanderburgh
Burns, John T.	Lafayette	Tippecanoe
Burns, Paul E.	Montpelier	Delaware-Blackford
Burwell, Stanley W.	Muncie	Delaware-Blackford
Bush, Charles E.	Kirklin	Clinton
Bush, Edward R.	Anderson	Madison
Bush, Hargis R.	Cannelton	Perry
Bush, Jack A.	Lafayette	Tippecanoe
Buslee, Roger M.	South Bend	St. Joseph
Bussard, Clifford F. (S)	South Bend	St. Joseph
Bussard, Frank W.	South Bend	St. Joseph
Butler, Joe B.	Crothersville	Jackson-Jennings
Butler, John O.	Indianapolis	Marion
Butler, Robert M.	Indianapolis	Marion
Butterfield, Robert M.	Muncie	Delaware-Blackford
Butts, Milton A.	South Bend	St. Joseph
Butz, Ralph O.	Muncie	Delaware-Blackford
Byrd, Ryland P.	Jeffersonville	Clark
Byrn, Howard W. (S)	Oxford	Floyd
Byrne, Louis	Bloomington	Owen-Monroe
Byrne, Robert J.	Bicknell	Knox

C

Cabigas, Jose S.	Richmond	Madison
Cagle, Bob R.	New Palestine	Hancock
Cahn, Hugo M.	Indianapolis	Marion
Cahn, Peter H.	Indianapolis	Marion
Cahue, Antonio R.	Gary	Lake
Cain, David R.	New Castle	Henry
CaJacob, Melville E.	Terre Haute	Vigo
Caldwell, Marilyn R.	Indianapolis	Marion
Caldwell, Milton V.	Terre Haute	Vigo
Calhoon, John P.	Indianapolis	Hendricks
Call, Herbert F.	Indianapolis	Marion
Callaghan, Winship C.	Greensburg	Decatur
Calli, Louis J.	North Vernon	Jackson-Jennings
Calvert, Raymond R.	Lafayette	Tippecanoe
Calvin, Helen M.	South Bend	St. Joseph
Calvin, O. Walter	South Bend	St. Joseph
Cameron, Don F.	Angola	Steuben
Cameron, Mary H.	Angola	Steuben
Campagna, Ettor A.	East Chicago	Lake
Campbell, Frank	Anderson	Madison
Campbell, H. Edwin, Jr.	Indianapolis	Marion
Campbell, John A.	Indianapolis	Marion
Campbell, Patrick B.	Elkhart	Elkhart
Campbell, Richard W.	Indianapolis	Marion
Campbell, Robert L.	Indianapolis	Marion
Campbell, Sam W.	New Castle	Henry
Campbell, William T.	Bloomington	Owen-Monroe
Canganelli, Vincent G.	Lafayette	Tippecanoe
Cannon, Daniel H.	New Albany	Floyd
Cantwell, Edgar R.	Vincennes	Knox
Caplin, Irvin	Indianapolis	Marion
Caplin, Samuel S.	Marion	Marion
Caputi, Saverio	Indianapolis	Marion
Carberry, George A.	Gary	Lake
Carbone, Joseph A.	Gary	Lake
Carey, J. Albert	Gary	Lake
Carlberg, Dale L.	Jeffersonville	Clark
Carlo, Ernest R. (S)	Fort Wayne	Allen
Carlson, Milton R.	Portage	Porter
Carlson, Norman R.	Michigan City	La Porte
Carlson, Ralph F.	Evansville	Vanderburgh
Carlyle, Ivan E. (S)	Michigantown	Clinton
Carmody, Raymond F.	Gary	Lake
Carney, Joel T. (S)	Jeffersonville	Clark
Carpenter, Bennie F.	Crown Point	Lake
Carpenter, James B.	Lafayette	Tippecanoe
Carpenter, Ramesh S.	Garrett	DeKalb
Carpenter, Robert S.	W. Lafayette	Tippecanoe
Carpentier, James R.	La Porte	La Porte
Carr, Joseph H.	Henryville	Clark
Carrel, Francis E.	Frankfort	Clinton
Carroll, Bertha Rose	W. Lafayette	Tippecanoe
Carroll, John C.	Decatur	Adams
Carroll, Mary E.	Crown Point	Lake
Carson, Wayne	Indianapolis	Marion
Carter, Eunice M.	Noblesville	Hamilton
Carter, F. R. N. (S)	South Bend	St. Joseph
Carter, Fred S.	La Porte	La Porte
Carter, James E.	Indianapolis	Marion
Carter, Jean V.	Tipton	Tipton
Cartwright, Glen W.	Lafayette	Tippecanoe
Carty, Charles B.	Pekin	Washington
Casey, Stanley M. (S)	Huntington	Huntington
Cassady, James V. (S)	South Bend	St. Joseph
Cassady, John R.	South Bend	St. Joseph
Cast, William R.	Indianapolis	Marion
Castro, Ignacio B., Jr.	Scottsburg	Scott
Cates, Jeryl R.	Evansville	Vanderburgh
Cattell, Lee M.	Kokomo	Howard
Caudill, Rodney C.	Anderson	Madison
Cavins, Alexander W.	Terre Haute	Vigo
Caylor, Charles H.	Bluffton	Wells
Caylor, Harold D.	Bluffton	Wells
Caylor, Truman E.	Bluffton	Wells
Chael, Thomas C.	Munster	Lake
Challman, William B.	Mt. Vernon	Posey
Chamberlain, Donald S.	South Bend	St. Joseph
Chambers, Alan R.	Fort Wayne	Allen
Chambers, Carol R.	Union City	Randolph
Chambers, Leroy B.	Union City	Randolph
Chamblee, Roland W.	South Bend	St. Joseph
Chandler, Leon H.	Goshen	Elkhart
Chappel, Alfred T.	Franklin	Johnson
Chase, James A.	Fort Wayne	Allen
Chattin, Herbert O.	Vincennes	Knox
Chattin, Robert E.	Loogootee	Daviess-Martin
Chattin, William R.	Indianapolis	Marion
Chattin, Vance J.	Washington	Daviess-Martin
Chau, Andrew Y. S.	Terre Haute	Vigo
Chavez, Mauro E.	Indianapolis	Marion

Name	City	County
Cheesman, Donald D.	Danville	Hendricks
Chen, Ko K.	Indianapolis	Marion
Cheng, Sylvia F.	Logansport	Cass
Chernish, Stanley M.	Indianapolis	Marion
Chevalier, Robert B.	Indianapolis	Marion
Childs, Wallace E.	Madison	Jefferson-Switzerland
Chivington, Paul V.	Indianapolis	Marion
Choslovsky, Sydney	Gary	Lake
Christie, Marvin C.	Beech Grove	Marion
Christophel, Verna A.	Mishawaka	St. Joseph
Chroniak, Walter	Indianapolis	Marion
Chu, Johnson C. S.	Logansport	Cass
Chube, David D.	Gary	Lake
Church, Robert A.	Munster	Lake
Clark, Charles M., Jr.	Boston, Mass.	Marion
Clark, George A.	Indianapolis	Marion
Clark, Ivan A.	Paoli	Orange
Clark, Jack P.	Syracuse	Elkhart
Clark, Lawson J.	Indianapolis	Marion
Clark, Lintner E.	Muncie	Delaware-Blackford
Clark, Robert M.	Muncie	Delaware-Blackford
Clark, Thomas W.	Evansville	Vanderburgh
Clark, William B., Jr.	Jeffersonville	Clark
Clark, William H.	South Bend	St. Joseph
Clark, William R., Jr.	Ft. Lewis, Wash.	Allen
Clark, William R.	Fort Wayne	Allen
Clarkson, Clarence G.	Liberty	Wayne-Union
Classen, Pete R. C.	Elkhart	Elkhart
Clay, Eleanor	Columbus	Bartholomew-Brown
Clevinger, William G.	Indianapolis	Marion
Cline, Donald L.	Indianapolis	Marion
Cline, Kenneth L.	Wyatt	St. Joseph
Close, Gerald A.	S. Rhodesia, Africa	Marion
Close, W. Donald	Indianapolis	Marion
Clouse, John F.	Richmond	Wayne-Union
Clouse, Paul A.	Evansville	Vanderburgh
Clunie, William A.	Huntington	Huntington
Coates, Jacqueline	Indianapolis	Marion
Coats, Eli A.	Indianapolis	Hendricks
Coble, Frank H.	Richmond	Wayne-Union
Cochran, Harry A., Jr.	Fort Wayne	Allen
Cochran, Robert B.	Muncie	Delaware-Blackford
Cockrum, William M.	Evansville	Vanderburgh
Coddens, Avery L.	Earl Park	Benton
Coffel, Melvin H.	Vincennes	Knox
Coggeshall, Warren E.	Indianapolis	Marion
Cohen, Hyman	Gary	Lake
Cohen, Irving	Plainfield	Hendricks
Cohn, Alvin F.	Greenwood	Marion
Cole, Ira (S)	Lafayette	Tippecanoe
Coleman, Floyd B.	Waterloo	DeKalb
Coleman, Henry G.	Salem	Washington
Coleman, Joseph E.	Evansville	Vanderburgh
Colip, George D.	South Bend	St. Joseph
Collins, Hubert L.	Indianapolis	Marion
Collins, Jack T.	Bluffton	Wells
Collins, Margaret C.	Muncie	Delaware-Blackford
Collins, Robert C.	Indianapolis	Marion
Colosey, Frederick J.	South Bend	St. Joseph
Colvin, Robert C.	Newburgh	Warrick
Combs, Daniel	DeRidder, La.	Knox
Combs, Herman T.	Evansville	Vanderburgh
Combs, John H.	Evansville	Vanderburgh
Combs, Stuart R.	Terre Haute	Vigo
Comeau, William J.	Marion	Grant
Comer, Kenneth E.	Mooresville	Morgan
Compton, George L.	Tipton	Tipton
Compton, Walter A.	Elkhart	Elkhart
Congleton, G. C. (S)	Terre Haute	Vigo
Conklin, James O.	Terre Haute	Vigo
Conklin, Raymond L. (S)	Elkhart	Elkhart
Conley, John E. (S)	Fort Wayne	Allen
Conley, Joseph L. (S)	Indianapolis	Marion
Conley, Thomas M.	Kokomo	Howard
Connell, Vactor O.	Bourbon	Marshall
Connelly, Jerry H.	Fort Wayne	Allen
Connelly, Richard D.	Fort Wayne	Allen
Connerley, Marion L.	Terre Haute	Vigo
Connoy, Leo F.	Westfield	Hamilton
Conrad, Everett L.	Brazil	Clay
Conrad, Henry W.	Lawrenceburg	Dearborn-Ohio
Constan, Evan	Cincinnati, Ohio	La Porte
Conway, Chester C.	Indianapolis	Marion
Conway, Glenn	Indianapolis	Marion
Conway, Thomas J.	Terre Haute	Vigo
Cook, Charles E.	North Manchester	Wabash
Cook, Gordon C.	South Bend	St. Joseph
Cook, Melvin D.	New Albany	Floyd
Cook, Robert G.	Bluffton	Wells
Cookson, Lawrence U.	Indianapolis	Marion
Cooney, Charles J.	Fort Wayne	Allen
Coons, John D. (S)	Lebanon	Boone
Coons, Ritchie	Lebanon	Boone
Cooper, B. Trent	Roanoke	Huntington
Cooper, Harry L. (S)	South Bend	St. Joseph
Cooper, John F.	Muncie	Delaware-Blackford
Cooper, Leo K.	Gary	Lake
Cooper, Waller W.	Evansville	Vanderburgh
Cope, Stanton E.	Huntington	Huntington
Corcoran, Patrick J. V.	Evansville	Vanderburgh
Cormican, Herbert L.	Elkhart	Elkhart
Cornacchione, Matthew	Indianapolis	Marion
Corpe, Kenneth F.	Rushville	Rush
Corrao, Gaetano	Gary	Lake
Corrao, Thomas J.	Jeffersonville	Clark
Cortese, James V.	Indianapolis	Marion
Cortese, Thomas A., Jr.	San Francisco, Calif.	Marion
Cortese, Thomas A.	Indianapolis	Marion
Costello, Albert J.	Munster	Lake
Costin, Robert L.	Indianapolis	Marion
Cotter, Edward R.	Hammond	Lake
Cottrell, Robert F.	Fort Wayne	Allen
Coughenour, J. Robert	Indianapolis	Marion
Countryman, Frank W.	Indianapolis	Marion
Coursey, James O., Jr.	Plymouth	Marshall
Covalt, Wendell E.	Muncie	Delaware-Blackford
Covell, Harry M.	Auburn	DeKalb
Covey, Thomas J.	Valparaiso	Porter
Cox, Alfred C.	South Bend	St. Joseph
Cox, J. Bruce	Evansville	Vanderburgh
Cox, Leon T.	Richmond	Wayne-Union
Coyner, Alfred B. (S)	Lafayette	Tippecanoe
Craft, Kenneth L. (S)	Indianapolis	Marion
Craig, Alexander F.	Indianapolis	Marion
Craig, Harry L.	Huntingburg	Dubois
Craig, Reuben	Kokomo	Howard
Craig, Reuben A. (S)	Kokomo	Howard
Craig, Richard M.	Fort Wayne	Allen
Craig, Robert A.	Syracuse	Elkhart
Crates, Gordon C.	Denver	Miami
Crawford, James H.	Evansville	Vanderburgh
Crawford, John A.	Indianapolis	Marion
Crawford, Theodore R.	Kokomo	Howard
Creek, Jean A.	Bloomington	Owen-Monroe
Crevello, Albert J.	Evansville	Vanderburgh
Crimm, Paul D.	Evansville	Vanderburgh
Cripe, Earl P.	Bremen	Marshall
Cripe, William H.	Portland	Jay
Crise, John R.	Portage	Porter
Crist, John R.	Mt. Vernon	Posey
Cristee, James W.	Terre Haute	Vigo
Crockett, Franklin S. (H)	W. Lafayette	Tippecanoe

Name	City	County
Crockett, Wayne A.	Terre Haute	Vigo
Cron, William J.	Warsaw	Kosciusko
Cronin, H. Joseph	Indianapolis	Marion
Crosby, Reid C.	Bedford	Lawrence
Cross, David G.	Indianapolis	Marion
Crouse, Ben E.	Frankfort	Clinton
Crowder, James H.	Sullivan	Sullivan
Crudden, Charles H.	Evansville	Vanderburgh
Crum, Marion M.	Angola	Steuben
Cuff, Steve C.	Fort Wayne	Allen
Culbertson, Carl S.	South Bend	St. Joseph
Culbertson, Clyde G.	Indianapolis	Marion
Cullen, P. Kent, Jr.	Indianapolis	Marion
Cullison, Charles W.	Fort Wayne	Allen
Cullison, John L.	Muncie	Delaware-Blackford
Cullnane, Chris W.	Evansville	Vanderburgh
Culloden, William G. (S)	Indianapolis	Marion
Culp, John E.	Fort Wayne	Allen
Cumming, James R.	Indianapolis	Marion
Cunningham, Gene C.	Indianapolis	Marion
Cunningham, Robert D.	Marion	Grant
Cure, Charles W.	Indianapolis	Marion
Cure, Elmer T.	Muncie	Delaware-Blackford
Currie, Robert W.	Indianapolis	Marion
Curry, R. Louis	Indianapolis	Marion
Curtner, Myron L. (S)	Vincennes	Knox
Cusick, James A.	Indianapolis	Marion
Custer, Edward W.	South Bend	St. Joseph
Custer, Norman L.	Marion	Grant
Cuthbert, Marvin P.	Indianapolis	Marion
Czenkusch, Helen G.	Indianapolis	Marion

D

Daggy, James R.	Richmond	Wayne-Union
Dahling, Clemens W.	New Haven	Allen
Dahling, Fred W.	New Haven	Allen
Dainko, Alfred J.	East Chicago	Lake
Daley, Edward H.	Indianapolis	Marion
Dallas, Fred R.	Indianapolis	Marion
Dallas, Mary E.	Indianapolis	Marion
Dalton, Naomi L.	Indianapolis	Owen-Monroe
Dalton, William W.	Indianapolis	Marion
Dalton, Wilson L.	Shelbyville	Shelby
Daly, Joseph M.	Indianapolis	Marion
Daniel, John C. (S)	Laguna Hills, Calif.	Marion
Daniel, Robert A.	Gary	Lake
Dannacher, William D.	Wabash	Wabash
Darbro, David A.	Indianapolis	Marion
Darling, Dorothy R.	Gary	Lake
Das, Amal K.	Kokomo	Howard
Datzman, Basil J.	La Porte	La Porte
Datzman, Richard C.	Fort Wayne	Allen
Daugherty, Forest D.	Columbus	Bartholomew-Brown
Daugherty, Fred N. (S)	Crawfordsville	Montgomery
Daugherty, William L.	Hutsonville, Ill.	Sullivan
Dauscher, Dean D.	Fort Wayne	Allen
David, George J.	Muncie	Delaware-Blackford
Davidoff, Manuel A.	Fort Wayne	Allen
Davidson, Dale A.	Indianapolis	Marion
Davidson, Harold H.	Evansville	Vanderburgh
Davidson, N. Cort	Indianapolis	Marion
Davis, Bennie L.	Indianapolis	Marion
Davis, Carl M. (S)	Valparaiso	Porter
Davis, Claude E.	Angola	Steuben
Davis, Edward A.	South Bend	St. Joseph
Davis, Grayson B.	Lafayette	Tippecanoe
Davis, Howard B.	Lafayette	Tippecanoe
Davis, John A.	Flat Rock	Shelby
Davis, Joseph B.	Marion	Grant
Davis, Kenneth D.	Evansville	Vanderburgh
Davis, Margaret M.	Indianapolis	Marion
Davis, Marvin R.	Columbus	Bartholomew-Brown
Davis, Max D.	Evansville	Vanderburgh
Davis, Merrill S. (S)	Marion	Grant
Davis, Paul E.	Terre Haute	Vigo
Davis, Sam J.	Indianapolis	Marion
Davis, Thomas N. III	Hammond	Lake
Davis, William H.	New Market	Montgomery
Day, William D. C.	Seymour	Jackson-Jennings
Dayson, Louie O.	Vincennes	Knox
Deal, Eleanor H.	Speedway City	Marion
Dean, Donald I.	Rushville	Rush
Dearmin, Robert M.	Indianapolis	Marion
DeArmond, Murray	Indianapolis	Marion
De Bois, Elon	Gary	Lake
Deever, John W.	Indianapolis	Marion
DeFries, John J.	New Paris	Elkhart
DeGrazia, Eugene J.	Valparaiso	Porter
Dehner, John R.	Richmond	Wayne-Union
Deitch, Robert D.	Indianapolis	Marion
del Bando, Juan N.	East Chicago	Lake
DeMotte, C. Bowen	Greenwood	Marion
DeNaut, James F.	Knox	Starke
Denham, Robert H.	South Bend	St. Joseph
Dennison, Alfred D., Jr.	Indianapolis	Marion
Denny, Forrest L.	Indianapolis	Marion
Denny, James W.	Indianapolis	Marion
Denny, Melvin H.	Anderson	Madison
Denton, Larkin D.	Greentown	Howard
Denzer, Edward K.	Evansville	Vanderburgh
Denzer, William O.	Evansville	Vanderburgh
Deogracias, Francisco D.	Edinburg	Johnson
DePorter, Louis A.	Munster	Lake
Deppe, Charles F.	Franklin	Johnson
Derhammer, George L.	Brookston	Tippecanoe
Dersch, David M.	Indianapolis	Marion
Dester, Herbert E. (S)	Berne	Adams
Dettloff, Frederick R.	Greencastle	Putnam
Deupree, William D.	Shelbyville	Shelby
Deur, Julius J.	Lafayette	Tippecanoe
Deutsch, William	Muncie	Delaware-Blackford
Devetski, Robert L.	South Bend	St. Joseph
DeVoe, Kenneth R.	South Bend	St. Joseph
DeWees, Dwight L.	Indianapolis	Marion
DeWester, Gerald M.	Indianapolis	Marion
Dickens, Karl L.	Martinsville	Morgan
Dickerson, W. Martin	Monticello	White
Dickson, Carolyn L.	Indianapolis	Marion
Dickson, Dale D.	Greensburg	Decatur
Dieckman, Herbert S.	Evansville	Vanderburgh
Dierdorf, Fred W.	Terre Haute	Vigo
Dierolf, Edward J.	Gary	Lake
Dieter, William J.	Westville	La Porte
Dietl, Ernest L.	South Bend	St. Joseph
Dietz, David J.	Muncie	Delaware-Blackford
Dill, Charles W.	Beech Grove	Marion
Dill, Myron K.	Indianapolis	Marion
Dillman, Carl E.	Corydon	Harrison-Crawford
Dillon, John F.	Indianapolis	Marion
Dilts, Robert L.	Indianapolis	Marion
Dimitroff, Lambro	Calumet City, Ill.	Lake
Dimmett, James D.	Chandler	Warrick
Dingle, Paul E.	Richmond	Wayne-Union
Dingley, Albert F.	South Bend	St. Joseph
Dininger, William S. (S)	Winchester	Randolph
Dino, Florian S.	Indianapolis	Marion
Dintaman, Paul G.	Indianapolis	Marion

Name	City	County
Dirks, Kenneth R.	APO, San Francisco, Calif.	Marion
Disney, Charles T.	Gary	Lake
Dittmer, Jack E.	Valparaiso	Porter
Dittmer, Thomas L.	Valparaiso	Porter
Doan, John E.	Decatur	Adams
Dodd, Robert D.	South Bend	St. Joseph
Dodd, Roberts K.	Evansville	Vanderburgh
Dodds, James U.	Hartford City	Delaware-Blackford
Dodds, Wemple	Crawfordsville	Montgomery
Doenges, James L.	Anderson	Madison
Doermann, Paul E.	Huntington	Huntington
Doherty, Raymond J.	Crown Point	Lake
Dolan, Patrick A.	Indianapolis	Marion
Doles, Ted S.	Middletown	Madison
Dolezal, Bernard J.	South Bend	St. Joseph
Donahue, Claude M.	Carmel	Hamilton
Donahue, Francis E.	Dublin	Henry
Donahue, George R.	Lafayette	Tippecanoe
Donahue, James M.	Indianapolis	Marion
Donaldson, Frank C.	Anderson	Madison
Donaldson, Miles W.	Marion	Grant
Donato, Albert M.	Indianapolis	Marion
Donesa, Antonio B.	Fort Wayne	Allen
Doneff, Ronald H.	Gary	Lake
Donnally, George A.	Portland	Jay
Donnelly, Everett F.	South Bend	St. Joseph
Doran, J. Hal	Indianapolis	Marion
Dormire, Robert D.	Warsaw	Kosciusko
Dorrance, Thomas O.	Bluffton	Wells
Doss, Jerome F.	Kokomo	Howard
Doughty, Samuel R., Jr.	Indianapolis	Marion
Douglas, William T.	Indianapolis	Marion
Dovey, Edward G.	Elkhart	Elkhart
Dowd, Joseph A.	Indianapolis	Marion
Dowell, Emil H. (S)	Rockville	Parke-Vermillion
Downer, Luther H.	Evansville	Vanderburgh
Dragoo, John R.	Wabash	Wabash
Drake, Dale W.	Evansville	Vanderburgh
Drake, Ellery T.	Martinsville	Morgan
Drake, James R.	Anderson	Madison
Drake, John C.	Anderson	Madison
Drake, Marion C.	Elwood	Madison
Drennen, Robert V.	Anderson	Madison
Dryden, Gale E.	Indianapolis	Marion
Dublin, Madeline P.	Francesville	Tippecanoe
DuBois, Charles C. (S)	Warsaw	Kosciusko
DuBois, Ramon B.	Lafayette	Tippecanoe
Dudgeon, Charles A.	Hartford City	Delaware-Blackford
Dugan, Thomas	Columbus	Bartholomew-Brown
Dugan, William M., Jr.	Indianapolis	Marion
Dukes, Betty	Dugger	Sullivan
Dukes, David J.	Corydon	Harrison-Crawford
Dukes, Joe	Dugger	Sullivan
Dulin, Basil B.	Anderson	Madison
Dumanian, Ara V.	Homewood, Ill.	Lake
Dunbar, Fred E.	Marion	Grant
Duncan, John S.	Gary	Lake
Duncan, Raymond	Bedford	Lawrence
Duncan, Stuart J.	Indianapolis	Marion
Duncan, William A.	Indianapolis	Marion
Dunham, Henry H.	Wabash	Wabash
Dunkin, Ramon S.	Indianapolis	Marion
Dunlap, D. Logan	South Bend	St. Joseph
Dunning, Preston M.	East Chicago	Lake
Dunning, Thomas W.	Muncie	Delaware-Blackford
Dunstone, Harry C.	Fort Wayne	Allen
Dupler, Lee F.	Frankfort	Clinton
Duque, Fausto	Clarksville	Clark
Durham, Lowell J.	La Porte	La Porte
Durham, Thomas E.	Elkhart	Elkhart
Durkee, Melvin S.	Evansville	Vanderburgh
Durkin, John W., Jr.	Indianapolis	Marion
Dusard, Joseph C.	Bedford	Lawrence
DuSold, Donald D.	Crown Point	Lake
Dutchess, C. Toney	Galveston	Cass
Dutchman, William R.	Muncie	Delaware-Blackford
Dyar, Edwin W.	Indianapolis	Marion
Dyar, Robert W.	Indianapolis	Marion
Dycus, Walter A.	Evansville	Vanderburgh
Dye, Cloyd L.	New Castle	Henry
Dye, William E.	Oakland City	Gibson
Dyer, George W.	Terre Haute	Vigo
Dyer, Wallace K.	Evansville	Vanderburgh
Dyke, Richard W.	Indianapolis	Marion
Dyken, Mark L.	Indianapolis	Marion
Dyken, Paul R.	Indianapolis	Marion
Dykhuizen, Theodore A.	Frankfort	Clinton
Dziabis, Marvin D.	Wabash	Wabash

E

Eades, R. Charles	South Bend	St. Joseph
Earl, Max M.	Kokomo	Howard
Earp, Evanson B.	Indianapolis	Marion
Easter, James N.	New Castle	Henry
Eastman, Joseph R., Jr.	Indianapolis	Marion
Eaton, Edwin R.	Indianapolis	Marion
Eaton, Lyman D.	Indianapolis	Marion
Eaton, Marion J.	Lafayette	Tippecanoe
Ebbinghouse, Tom	Richmond	Wayne-Union
Ebert, J. Wayne (S)	Indianapolis	Marion
Eberwein, John H. (S)	Indianapolis	Marion
Ebin, Judah L.	Evansville	Vanderburgh
Echeverria, Rodolfo E.	Elkhart	Elkhart
Echsner, Herman J.	Columbus	Bartholomew-Brown
Echt, Charles R.	Indianapolis	Marion
Eckert, Russell A.	Logansport	Cass
Edmonds, Kendrick	Bedford	Lawrence
Edwards, Bernard E.	South Bend	St. Joseph
Edwards, Henry G.	Terre Haute	Vigo
Edwards, William F.	New Albany	Floyd
Edwards, Wendell L.	Indianapolis	Marion
Egan, Sherman L.	South Bend	St. Joseph
Egbert, Herbert L.	Indianapolis	Marion
Egger, Ross L.	Middletown	Delaware-Blackford
Eggers, Ernest L. (S)	Hammond	Lake
Eggers, Henry W.	Munster	Lake
Eggers, Richard R.	Crawfordsville	Montgomery
Egnatz, Charles D.	Schererville	Lake
Egnatz, Nicholas	Hammond	Lake
Ehrich, William S. (S)	Manning, S. Carolina	Vanderburgh
Eicher, Palmer O.	Indianapolis	Marion
Eiler, Paul A.	North Manchester	Wabash
Eisaman, Jack L.	Bluffton	Wells
Eisenberg, David A.	Martinsville	Morgan
Eldridge, Gail E.	Indianapolis	Marion
Elkins, James P.	Indianapolis	Marion
Elleman, John H.	Kokomo	Howard
Ellett, John, Jr.	Coatesville	Putnam
Elliott, Paul W.	Lafayette	Tippecanoe
Elliott, Thomas A.	Elkhart	Elkhart
Ellis, Charles R.	Indianapolis	Marion
Ellis, Davis W., Jr.	Rushville	Rush
Ellis, Forrest D.	North Vernon	Jackson-Jennings
Ellis, George M.	Connersville	Fayette-Franklin
Ellis, Lyman H.	Lizton	Hendricks
Ellis, Seth W.	Anderson	Madison
Ellis, William N.	Indianapolis	Marion
Elshout, Clem H.	Michigan City	La Porte
Elsten, Aubrey W.	Anderson	Madison
Elston, Lynn W. (S)	Fort Wayne	Allen

Name	City	County
Elston, Ralph W.	Fort Wayne	Allen
Elward, Carl J.	Wabash	Wabash
Ely, Cecil W.	Jeffersonville	Clark
Emenhiser, Donald C.	Wilmette, Ill.	Allen
Emery, Charles B.	Bedford	Lawrence
Emery, Charles B., Jr.	Bloomington	Owen-Monroe
Emhardt, John T.	Indianapolis	Marion
Emhardt, John W. A. (S)	Indianapolis	Marion
Emme, Richard W.	Harlan	Allen
Endicott, Wayne H.	Greenfield	Hancock
Engel, Edgar L.	Evansville	Vanderburgh
Engel, Howard R.	South Bend	St. Joseph
Engeler, James E.	Lafayette	Tippecanoe
Engleman, Reinhold	Fort Wayne	Allen
English, Hubert M. (S)	Gary	Lake
English, John P.	South Bend	St. Joseph
Ensey, Philip L.	Terre Haute	Vigo
Entner, Charles L.	Dunkirk	Jay
Episcopo, Arsenius R.	Salem	Washington
Epps, James H.	Fort Wayne	Allen
Erdel, Milton W.	Frankfort	Clinton
Erehart, Mark G. (S)	Huntington	Huntington
Erhart, Herbert	Huntingburg	Dubois
Ericksen, Lester G.	South Bend	St. Joseph
Erickson, Gustaf W.	South Bend	St. Joseph
Ericson, Harold L.	Windfall	Tipton
Ericson, Homer S.	Kokomo	Howard
Erwin, W. Robert	La Porte	La Porte
Eshelman, Henry R.	Monterey	Pulaski
Eskew, Kenneth W.	Sullivan	Sullivan
Espino, Jose C.	Munster	Lake
Espy, Theodore R.	Gary	Lake
Estes, Ambrose C.	Bloomington	Owen-Monroe
Eugenides, Tatiana	Highland	Lake
Evans, Daniel R.	Valparaiso	Porter
Evans, David L.	W. Lafayette	Tippecanoe
Evans, Frederick H.	Indianapolis	Marion
Evans, Frederick J.	Clinton	Parke-Vermillion
Evans, Paul V.	Indianapolis	Marion
Everly, Ralph V.	Indianapolis	Marion
Everly, Stephan S.	Indianapolis	Marion
Eviston, John B. (S)	Huntington	Huntington
Ewer, Robert W.	Evansville	Vanderburgh
Ewing, Nathaniel D.	Vincennes	Knox

F

Fadell, Matthew J.	Gary	Lake
Fadul, Armand	Crown Point	Lake
Failey, Robert B., Jr.	Indianapolis	Marion
Fajardo, Manuel	Kouts	Porter
Fargher, Francis M.	Michigan City	La Porte
Farid, Rahim S.	Brazil	Clay
Farmer, Charles R.	Washington	Daviess-Martin
Farner, James E.	Cleveland, Ohio	St. Joseph
Farnsworth, Samuel A.	La Porte	La Porte
Farquhar, John S., Jr.	Fort Wayne	Allen
Farr, James C.	Bloomington	Owen-Monroe
Farrell, John J., Jr.	Greenfield	Hancock
Farrell, Joseph T.	Indianapolis	Marion
Farris, John J.	Washington	Daviess-Martin
Faul, Henry J.	Evansville	Vanderburgh
Faulkner, Donald J.	Culver	Marshall
Fausset, C. Basil	Indianapolis	Marion
Faust, Howard M., Jr.	Anderson	Madison
Faw, Melvin L.	Evansville	Vanderburgh
Fear, Olan D.	Elkhart	Elkhart
Fechtman, William F.	Indianapolis	Marion
Feeney, Martin T.	Indianapolis	Marion
Feferman, Martin E.	South Bend	St. Joseph
Feinberg, Irwin	East Chicago	Lake
Feinn, Harry S.	La Porte	La Porte
Feldman, Max	South Bend	St. Joseph
Feldner, Ronald P.	Munster	Lake
Fell, Robert M.	Rosedale	Parke-Vermillion
Fenneman, Robert J.	Evansville	Vanderburgh
Ferguson, Arthur N.	Fort Wayne	Allen
Ferguson, Donald H.	Anderson	Madison
Ferguson, William B.	Lafayette	Tippecanoe
Ferrara, Donald W.	Peru	Miami
Ferrara, Joseph F.	Franklin	Johnson
Ferrara, Samuel J.	Peru	Miami
Ferrell, Mars B.	Fortville	Madison
Ferry, Francis A.	Indianapolis	Marion
Ferry, John L.	Whiting	Lake
Fessler, Gordon S.	Rising Sun	Dearborn-Ohio
Fetrow, Kenneth O.	Munster	Lake
Fiacable, Joseph P.	Indianapolis	Marion
Fichman, Abraham M.	Fort Wayne	Allen
Fiederlein, Frederick J.	Muncie	Delaware-Blackford
Fields, Don C.	Lafayette	Tippecanoe
Fields, Donald L.	Kokomo	Howard
Fields, Max L.	Monticello	White
Filipek, Walter J.	South Bend	St. Joseph
Finfrock, James D.	Elkhart	Elkhart
Finneran, Joseph C.	Indianapolis	Marion
Fipp, August L.	Rome City	Noble
Firestein, Ben Z.	South Bend	St. Joseph
Firestein, Ray	South Bend	St. Joseph
Fisch, Charles	Indianapolis	Marion
Fischer, A. Alan	Indianapolis	Marion
Fischer, Burnell	Hammond	Lake
Fischer, Warren E.	Anderson	Madison
Fish, Clyde M. (S)	Edwardsburg, Mich.	St. Joseph
Fish, Edson C.	South Bend	St. Joseph
Fisher, Gerald E.	Ippy, Central African Republic	Marion
Fisher, Henry	Marion	Grant
Fisher, John E.	Attica	Fountain-Warren
Fisher, John E.	New Castle	Henry
Fisher, Lawrence F. (S)	South Bend	St. Joseph
Fisher, Pierre J., Jr.	Marion	Grant
Fisher, Walter S. (S)	Columbus	Bartholomew-Brown
Fisher, William C.	Evansville	Vanderburgh
Fitzgerald, Brice E.	W. Lafayette	Tippecanoe
Fitzgerald, William J.	Indianapolis	Marion
Fitzkee, William E.	Albion	Noble
Fitzpatrick, H. W. (S)	Elwood	Madison
Fitzpatrick, James S.	Portland	Jay
Fitzpatrick, William J.	Munster	Lake
Flack, Russell A.	Lafayette	Tippecanoe
Flaherty, Robert A.	Fort Wayne	Allen
Flanagan, Estle P. (S)	Walton	Cass
Flanagan, Paul M.	Indianapolis	Marion
Flanders, Robert, Jr.	Indianapolis	Marion
Flanigan, Meredith B.	Indianapolis	Marion
Flannigan, Harley F.	LaGrange	LaGrange
Fleischer, Jacob C.	East Chicago	Lake
Fleischl, Herbert	Indianapolis	Marion
Flick, John J.	Indianapolis	Marion
Flora, Fred W.	Frankfort	Clinton
Flora, Joseph O.	Indianapolis	Marion
Florcruz, Arturo R.	Highland	Lake
Floyd, Malcolm S.	Vincennes	Knox
Fogel, Ernest J.	Logansport	Cass
Folck, John K.	Princeton	Gibson
Foley, Hansel O.	South Bend	St. Joseph
Foley, Phillip D.	Middletown	Madison
Folkening, Norval C.	Indianapolis	Marion
Foltz, Lloyd E.	Brownsburg	Hendricks
Fong, Theodore C. C.	Madison	Jefferson-Switzerland
Forbes, Violet Crabbe	Wolcott	White
Forchetti, John A.	Chesterton	Porter
Forrest, O. Norman, Jr.	South Bend	St. Joseph
Forsee, Norman E.	Jeffersonville	Clark

Name	City	County
Fortner, Ray E.	Columbus	Bartholomew-Brown
Fortuna, Frank W.	Beech Grove	Marion
Fosbrink, Ephraim L.	Syracuse	Elkhart
Fosgate, Harold L.	Indianapolis	Marion
Foster, Douglas L.	Gary	Lake
Foster, John A.	Indianapolis	Marion
Foster, Lee N.	Indianapolis	Marion
Foster, Ray D.	Indianapolis	Marion
Foster, Ray T.	New Castle	Henry
Foster, Robert H. K.	Franklin	Johnson
Fountaine, Thomas J.	Bedford	Lawrence
Fouts, Paul J.	Indianapolis	Marion
Fowler, R. Ross	Bloomington	Owen-Monroe
Fox, C. Philip	Washington	Daviess-Martin
Fox, Jack M.	Munster	Lake
Fox, Richard F.	Lafayette	Tippecanoe
Foy, Thomas D.	Fort Wayne	Allen
Frable, Frank L., Jr.	Lawrenceburg	Dearborn-Ohio
Frahm, Charles	Homewood, Ill.	Lake
France, Lloyd C.	Plymouth	Marshall
Frank, Herbert	South Bend	St. Joseph
Frank, John R. (S)	Valparaiso	Porter
Frank, Lyall, Jr.	South Bend	St. Joseph
Frank, Lyall L.	South Bend	St. Joseph
Frankhouser, Charles M. A., Jr.	Fort Wayne	Allen
Franklin, William L.	Indianapolis	Marion
Frankowski, Clementine	Whiting	Lake
Franz, Sherman G.	Indianapolis	Marion
Frasch, Mahlon G.	Lafayette	Tippecanoe
Frash, DeVon W., Jr.	South Bend	St. Joseph
Frazier, John L.	Kokomo	Howard
Freeby, C. William	Decatur	Adams
Freed, Carl A.	Indianapolis	Marion
Freed, John E., Jr.	Terre Haute	Vigo
Freeland, Bill E.	Batesville	Ripley
Freeman, Leslie W.	Indianapolis	Marion
Freeman, Max E.	Carmel	Marion
French, Richard N.	Indianapolis	Marion
Fretz, Richard C.	Kokomo	Howard
Frey, Harley H., Jr.	Lafayette	Tippecanoe
Frey, William B.	South Bend	St. Joseph
Friedman, Isadore E.	Hammond	Lake
Friedman, Morris S.	South Bend	St. Joseph
Fritch, John M.	Lafayette	Tippecanoe
Frith, Louis G.	South Bend	St. Joseph
Froderman, Stanley E.	Brazil	Clay
Fromhold, Willis A.	Indianapolis	Marion
Frost, Robert J.	Michigan City	La Porte
Fry, Robert D.	Indianapolis	Marion
Fuelling, James L.	Marion	Grant
Fugelso, Erling S.	Indianapolis	Marion
Fullam, Richard G.	Fort Wayne	Allen
Fuller, Robert G.	Columbus	Bartholomew-Brown
Fulper, James C.	Jolan, Calif.	Marion
Fulton, William H.	Indianapolis	Marion
Fultz, Roy L.	Salem	Washington
Fundenberger, Martin	Indianapolis	Marion
Furr, Jack D.	Kingman	Fountain-Warren
Fuson, Wenfred J.	Greencastle	Putnam
Futterknecht, James O.	Elkhart	Elkhart
G		
Gabe, William E. (S)	Orinda, Calif.	Marion
Gabovitch, Edward R.	Indianapolis	Marion
Gabrielsen, Ted H.	International P.O. Box 1192, Seoul, Korea	Marion
Gaddy, Euclid T. (S)	Indianapolis	Marion
Gaddy, Nelson D.	Indianapolis	Marion
Gaffney, Raymond	South Bend	St. Joseph
Gahimer, Joe E.	Anderson	Madison
Gailey, Ivan L.	Indianapolis	Parke-Vermillion
Galante, Albert	Munster	Lake
Galbreth, Jesse P. (S)	Burnettsville	White
Galliher, Marjorie J.	Muncie	Delaware-Blackford
Gallinatti, John J.	Gary	Lake
Gambill, J. Randolph	Indianapolis	Marion
Gambill, William D.	Indianapolis	Marion
Gammieri, Robert L.	Indianapolis	Marion
Gammell, Lindley L.	Columbus	Bartholomew-Brown
Ganser, Ralph V.	South Bend	St. Joseph
Ganser, Richard A.	Mishawaka	St. Joseph
Ganz, Max	Marion	Grant
Garber, J. Neill	Indianapolis	Marion
Garceau, George J. (S)	Indianapolis	Marion
Gard, Daniel A.	Crawfordsville	Montgomery
Gardiner, H. Glenn	Munster	Lake
Gardiner, Sprague H.	Indianapolis	Marion
Gardner, Austin L.	London, England	Marion
Gardner, Buckman	Indianapolis	Marion
Gardner, Melvin D.	Michigan City	La Porte
Gardner, Russell A.	Michigan City	La Porte
Garfield, Martin D.	Indianapolis	Marion
Garland, Edgar A.	Evansville	Vanderburgh
Garner, W. Stanley	Indianapolis	Marion
Garner, William H., Jr.	New Albany	Floyd
Garner, William H., Sr. (S)	New Albany	Floyd
Garrett, Robert A.	Indianapolis	Marion
Garrison, James L.	Cumberland	Hancock
Garrison, Leon J.	Gas City	Grant
Garst, Garland R.	Evansville	Vanderburgh
Garton, Harry W. (S)	Fort Wayne	Allen
Gastineau, David C.	Fort Wayne	Allen
Gates, George E.	South Bend	St. Joseph
Gattman, George B.	Elkhart	Elkhart
Gatzimos, Christos D.	Wabash	Wabash
Gaul, L. Edward	Evansville	Vanderburgh
Gaunt, Everett W.	Alexandria	Madison
Geckler, Charles E.	Muncie	Delaware-Blackford
Gehring, Thomas A.	Gary	Lake
Geick, Raymond G.	Fort Branch	Gibson
Geider, Roy A.	Indianapolis	Marion
Geiger, Dillon D.	Bloomington	Owen-Monroe
Geisinger, Lewis N. (S)	Auburn	De Kalb
Geisler, Hans E.	Indianapolis	Marion
Geller, Samuel	Evansville	Vanderburgh
Genna, Mary E. Miller	Hale's Corners, Wisc.	Marion
Gentile, John P.	New Albany	Floyd
Gentile, Jonathan P.	Fort Wayne	Allen
George, Charles L.	Indianapolis	Marion
Gerding, William J.	Fort Wayne	Allen
Gerig, Eldon L.	Mishawaka	St. Joseph
Gerrish, Donald A.	Terre Haute	Vigo
Gery, Richard E.	Lafayette	Tippecanoe
Getty, William H.	Evansville	Vanderburgh
Gevirtz, Milton B.	Munster	Lake
Gholz, Lawrence M.	Anderson	Madison
Gibbs, Joseph W.	Martinsville	Hendricks
Gibson, Alois E.	Richmond	Wayne-Union
Gibson, Greta Maxine	Indianapolis	Marion
Gibson, Robert K.	Muncie	Delaware-Blackford
Gick, Herman H. (S)	Indianapolis	Marion
Giffin, Charles S.	Fort Wayne	Allen
Gifford, Fred E.	Indianapolis	Marion
Gifford, J. Dean	Indianapolis	Marion
Gilbert, Robert G.	Tell City	Perry
Gill, Dee D.	Leesburg	Elkhart
Gill, D. Richard	Huntington	Huntington
Gillen, H. William	Indianapolis	Marion

Name	City	County
Gilles, Pierre	Gary	Lake
Gillespie, Charles F.	Indianapolis	Marion
Gillespie, Garland R.	Brownstown	Jackson-Jennings
Gillespie, Jacob E.	Indianapolis	Marion
Gilliland, John E.	Honduras, C. America	Marion
Gillim, Parvin D.	Indianapolis	Marion
Gillum, Eugene M.	Portland	Jay
Gilman, Marcus M. (S)	South Bend	St. Joseph
Gilmore, Robert W.	Michigan City	La Porte
Gilmore, Russell A. (S)	Michigan City	La Porte
Gingerick, Charles M.	Liberty Center	Wells
Giorgio, Douglas J.	Evansville	Vanderburgh
Girod, Arthur H.	Decatur	Adams
Girod, Donald A.	Indianapolis	Marion
Gish, Howard M.	Brookston	Tippecanoe
Gitlin, Max M.	Bluffton	Wells
Gitlin, William A.	Bluffton	Wells
Given, Gilbert Z.	East Chicago	Lake
Glackman, John C., Jr.	Rockport	Spencer
Gladstone, Naf H.	Fort Wayne	Allen
Glassley, Stephen H.	Fort Wayne	Allen
Glendening, John L. (S)	Indianapolis	Marion
Glendening, Richard L.	Logansport	Cass
Glock, Maurice E.	Fort Wayne	Allen
Glock, Wayne R.	Fort Wayne	Allen
Glover, John L.	Indianapolis	Marion
Glover, William J.	Gary	Lake
Goebel, Carl W.	Fort Wayne	Allen
Godersky, George E.	South Bend	St. Joseph
Gold, Marvin E.	Valparaiso	Porter
Goldbeck, Larry O.	Evansville	Vanderburgh
Goldberg, Harold B.	Gary	Lake
Golden, W. Y.	Jeffersonville	Clark
Goldenburg, Mitchell E.	East Chicago	Lake
Golding, Robert F.	Gary	Lake
Goldman, Samuel	Indianapolis	Marion
Goldsmith, David A.	Marion	Grant
Goldstone, Adolph	Gary	Lake
Goldstone, Arthur	Gary	Lake
Goldstone, Joseph	Gary	Lake
Goldstone, Robert J.	Gary	Lake
Goldstone, Sidney R.	Gary	Lake
Golper, Marvin N.	Kokomo	Howard
Gomez, Laura F.	Palos Heights, Ill.	Lake
Gomez, Rafael A.	Palos Heights, Ill.	Lake
Good, Richard P.	Kokomo	Howard
Goodell, Charles L.	Muncie	Delaware-Blackford
Goodman, Eli	Charlestown	Clark
Goodman, Hubert T.	Terre Haute	Vigo
Goodrum, William R.	Cayuga	Parke-Vermillion
Goodwin, Thomas	Gary	Lake
Gootee, Francis H.	Jasper	Dubois
Gootee, Thomas H.	Jasper	Dubois
Gordon, Joseph L. (S)	Wheeler	Porter
Gorham, Charles E.	New Paris	Elkhart
Gormley, Joseph J.	Indianapolis	Marion
Gosman, James H.	Indianapolis	Marion
Gossard, Meredith B.	Tipton	Tipton
Gossom, Donn R.	Terre Haute	Vigo
Gotay, Jose B.	Indianapolis	Marion
Gould, John C.	Fort Wayne	Allen
Gourieux, E. De Verre	Evansville	Vanderburgh
Govorchin, Alexander	East Chicago	Lake
Graber, Alvin R.	Nappanee	Elkhart
Graber, Benjamin R.	Waterloo	DeKalb
Graber, Martin J.	Berne	Adams
Graber, Virgil R.	Elkhart	Elkhart
Grabow, Emil F.	Munster	Lake
Graessle, Harold P. (S)	Seymour	Jackson-Jennings
Graf, Jerome A.	Bloomfield	Greene
Graf, John P.	South Bend	St. Joseph
Graf, Russell E.	Bluffton	Wells
Graham, Edward W.	Indianapolis	Marion
Graham, George M.	Fort Wayne	Allen
Graham, James C.	Fort Wayne	Allen
Graham, John D.	Indianapolis	Marion
Graham, William E.	Indianapolis	Marion
Grant, Benjamin F.	Gary	Lake
Grant, M. Arthur	Marion	Grant
Grant, Phyllis A.	New Castle	Henry
Graves, Noel S.	Vevay	Jefferson-Switzerland
Graves, Orville M. (S)	Princeton	Gibson
Gray, Daniel E.	Crown Point	Lake
Gray, Edwin H.	Elkhart	Elkhart
Gray, Howard R.	Indianapolis	Marion
Gray, Kenneth L.	Indianapolis	Marion
Gray, Leon	Martinsville	Morgan
Gray, Mary Case	Elkhart	Elkhart
Gray, William J.	Chesterfield	Madison
Grayson, Merrill	Indianapolis	Marion
Grayson, Ted L.	Indianapolis	Marion
Green, Frank H., Jr.	Rushville	Rush
Green, G. Richard	South Bend	St. Joseph
Green, George F.	South Bend	St. Joseph
Green, Joseph B.	Indianapolis	Marion
Green, Leonard J.	Valparaiso	Porter
Green, Morris	Indianapolis	Marion
Green, Norval E.	South Bend	St. Joseph
Green, Robert F.	Fort Wayne	Allen
Green, William L.	Shelbyville	Shelby
Greenberg, Harry L.	Rensselaer	Jasper
Greenberg, Louis T.	Evansville	Vanderburgh
Greene, Frederick G. (S)	Seelyville	Parke-Vermillion
Greene, Morgan E.	Indianapolis	Marion
Greene, Robert W.	Rensselaer	Jasper
Greene, William R.	Henryville	Clark
Greenlee, Joseph A., Jr.	Avilla	Noble
Greenlee, Robert L.	Fort Wayne	Allen
Gregg, Albert F.	Connersville	Fayette-Franklin
Gregg, Edwin E.	Thorntown	Boone
Gregoline, Amadeo F.	Gary	Lake
Gregoline, Eugene	Gary	Lake
Gregory, Delmar R.	Indianapolis	Marion
Gregory, Robert L.	Indianapolis	Marion
Greiber, Marvin F.	Muncie	Delaware-Blackford
Greisen, Jack G.	Whiting	Lake
Greist, John H.	Indianapolis	Marion
Gresham, Edwin L.	Aurora	Dearborn-Ohio
Grief, James V.	Indianapolis	Marion
Grief, Robert S.	Indianapolis	Marion
Griep, Arthur H.	Evansville	Vanderburgh
Griest, Walter D.	Fort Wayne	Allen
Griffin, Charles G.	Valparaiso	Porter
Griffin, Joseph P.	Chesterton	Porter
Griffin, Leslie W.	Indianapolis	Marion
Griffith, Harold R.	Fort Wayne	Allen
Griffith, James W. (S)	Sheridan	Hamilton
Griffith, Richard S.	Indianapolis	Marion
Griffith, Ross E.	Indianapolis	Marion
Grillo, Donald	South Bend	St. Joseph
Grimes, Hubert N.	Indianapolis	Marion
Grimm, William C. H., Jr.	Evansville	Vanderburgh
Gripe, Richard P.	Lafayette	Tippecanoe
Grisell, Ted L.	Indianapolis	Marion
Grorud, Alton C.	South Bend	St. Joseph
Gross, Joseph O.	Munster	Lake
Grosso, William G.	East Chicago	Lake
Grosz, Hanus J.	Indianapolis	Marion
Grothouse, Carl B.	Kokomo	Howard
Grove, James H.	South Bend	St. Joseph
Gruber, Charles M.	Indianapolis	Marion
Guckien, Joseph L.	Evansville	Vanderburgh
Guild, John K.	Plymouth	Marshall
Guin, Jere D.	Kokomo	Howard

Name	City	County
Gumbert, Jack L.	Ft. Rucker, Ala.	Marion
Gunderson, Shaun D.	Goshen	Elkhart
Gustafson, Milton H.	Muncie	Delaware-Blackford
Gustaitis, John W.	Whiting	Lake
Guthrie, James R.	Richmond	Wayne-Union
Guthrie, James U.	Peru	Miami
Guthrie, William H.	Butlerville	Jackson-Jennings
Gutierrez, Peter E.	Gary	Lake
Guttman, John B.	Wakarusa	Elkhart
Guzman, Marcelino F.	Morocco	Newton
H		
Haas, Charles F.	Lafayette	Tippecanoe
Habegger, Elmer D.	Indianapolis	Marion
Hachmeister, Charles W.	Evansville	Vanderburgh
Hackett, Walter G.	Fort Wayne	Allen
Hackney, Victor C.	Indianapolis	Marion
Hadey, James H.	Gary	Lake
Hadley, David	Indianapolis	Marion
Haffner, Herman G.	Fort Wayne	Allen
Hagan, Marion L.	French Lick	Orange
Haggard, David B.	Plainfield	Hendricks
Haggard, Edmund B.	Indianapolis	Marion
Haggerty, Fred E.	Greencastle	Delaware-Blackford
Haith, John W.	Gary	Lake
Halaby, Fouad A.	Fort Wayne	Allen
Haley, Alvin J.	Fort Wayne	Allen
Haley, George M.	South Bend	St. Joseph
Haley, Paul E.	South Bend	St. Joseph
Halfast, Richard W.	Kokomo	Howard
Hall, Bernard R.	Logansport	Cass
Hall, Donald L.	Petersburg	Pike
Hall, Jack H.	Indianapolis	Marion
Hall, James M.	South Bend	St. Joseph
Hall, Robert S.	Muncie	Delaware-Blackford
Hall, Thomas C.	Chesterton	Porter
Hall, William R.	Fort Wayne	Allen
Halleck, Harold J.	Winamac	Pulaski
Haller, Richard C.	Fort Wayne	Allen
Haller, Robert L.	Kempton	Tipton
Haller, Thomas C.	Crawfordsville	Montgomery
Halley, Robert	Gary	Lake
Hamer, Homer G. (S)	Indianapolis	Marion
Hamilton, Charles O.	South Bend	St. Joseph
Hamilton, Emory D.	Fort Wayne	Allen
Hamilton, George M.	Fort Wayne	Allen
Hamilton, Howard B.	Indianapolis	Marion
Hamilton, James R.	Mitchell	Lawrence
Hamilton, Thomas	Columbia City	Whitley
Hammel, Howard T.	Bedford	Lawrence
Hammer, Jay W.	Bloomington	Owen-Monroe
Hammer, Michael	East Chicago	Lake
Hammersley, George K.	Frankfort	Clinton
Hammond, R. Case	Evansville	Vanderburgh
Hammond, Stanley	Munster	Lake
Hampshire, Donald R.	Indianapolis	Marion
Hampton, James N.	Argos	Marshall
Han, Daniel	Gary	Lake
Hance, Darwood B.	Richmond	Wayne-Union
Hancock, John G.	Indianapolis	Marion
Haney, Leslie E.	Goshen	Elkhart
Haney, William K.	Madison	Jefferson-Switzerland
Hanley, Harriet F.	South Bend	St. Joseph
Hann, Eldon C.	Indianapolis	Marion
Hanna, Thomas A.	Indianapolis	Marion
Hannah, Jack W.	Elkhart	Elkhart
Hanneken, Vincent J.	Wabash	Wabash
Hannemann, Robert E.	Lafayette	Tippecanoe
Hanson, Martin F.	Elwood	Madison
Harcourt, Allan K.	Indianapolis	Marion
Harcourt, Robert S.	Indianapolis	Marion
Hardin, Wayne E.	Ossian	Wells
Harding, M. Richard	Indianapolis	Marion
Harding, Myron S. (S)	Indianapolis	Marion
Hardtke, Eldred F.	Bloomington	Owen-Monroe
Hare, Daniel M.	Evansville	Vanderburgh
Hare, Earl H. (S)	Indianapolis	Marion
Hare, Francis W., Jr.	Madison	Jefferson-Switzerland
Hare, Laura	Indianapolis	Marion
Harger, Robert W.	Indianapolis	Marion
Hargett, Herbert P.	Jeffersonville	Clark
Hargett, Isaac R.	Evansville	Vanderburgh
Harkness, Robert G. (S)	Terre Haute	Vigo
Harlan, William L.	Evansville	Vanderburgh
Harless, Clarence M. (S)	Chesterton	Porter
Harless, O. Fred	Monroeville	Allen
Harmon, Carl J.	Richmond	Wayne-Union
Harnden, Hurlbut L.	Marion	Grant
Harned, Ben K., Jr.	Evansville	Vanderburgh
Harper, James W.	East Chicago	Lake
Harrington, James F.	Logansport	Cass
Harris, C. Glenn	South Bend	St. Joseph
Harris, Carl B.	Indianapolis	Marion
Harris, George F.	Madison	Jefferson-Switzerland
Harris, James C.	Indianapolis	Marion
Harris, Neil R.	Goshen	Elkhart
Harris, Paul N.	Greenfield	Marion
Harris, Robert F.	Noblesville	Hamilton
Harris, Robert L.	Evansville	Vanderburgh
Harrison, Benjamin L.	New Castle	Henry
Harshman, James A.	Kokomo	Howard
Harshman, Louis P. (S)	Frankfort	Allen
Harstad, Casper	Rockville	Parke-Vermillion
Hart, L. Paul	Evansville	Vanderburgh
Hartenbower, David L.	Indianapolis	Marion
Harter, Eli B.	Lafayette	Tippecanoe
Hartley, Clarence A., Jr.	Evansville	Vanderburgh
Hartman, John J.	Angola	Steuben
Hartsough, Ralph I.	Lakeville	St. Joseph
Hartz, F. Minton	Evansville	Vanderburgh
Harvey, Bennett B.	Lafayette	Tippecanoe
Harvey, David M.	Munster	Lake
Harvey, Emerson C., Jr.	Kokomo	Howard
Harvey, Harry C. (S)	Franklin	Allen
Harvey, Hathaway K.	Indianapolis	Marion
Harvey, John C.	Auburn	DeKalb
Harvey, Ralph J. (S)	Zionsville	Boone
Harvey, Verne K., Jr.	Indianapolis	Marion
Harvey, Verne K., Sr.	Zionsville	Marion
Hasewinkel, Carroll W.	Carmel	Marion
Hasewinkle, August M.	Fort Wayne	Allen
Hash, John S.	Noblesville	Hamilton
Hashemi, Hossein	Warsaw	Kosciusko
Haslem, Ezra R.	Terre Haute	Vigo
Haslem, John R.	Terre Haute	Vigo
Hass, Caroline E.	W. Lafayette	Tippecanoe
Hass, Thomas W.	W. Lafayette	Tippecanoe
Hassel, Walter B.	Evansville	Vanderburgh
Hastings, Warren C.	Fort Wayne	Allen
Haswell, John	Vincennes	Knox
Hatfield, Nicholas W.	Indianapolis	Marion
Hathaway, C. Bishop	Auburn	DeKalb
Hattendorf, Anton P.	Fort Wayne	Allen
Hauersperger, Alfred D.	Columbus	Bartholomew-Brown
Haugseth, Ellsworth K.	South Bend	St. Joseph
Hausner, Murray M.	Covina, Calif.	Vigo
Havens, A. Lyle	Jeffersonville	Clark
Havens, Thomas R.	Jeffersonville	Clark
Havens, Oscar	Cicero	Hamilton
Havens, Russell E.	Fort Wayne	Allen
Hawes, Marvin E.	Columbus	Bartholomew-Brown
Hawk, Edgar A.	Richmond	Wayne-Union
Hawk, James H.	Indianapolis	Marion
Hawkins, Glen E.	South Bend	St. Joseph
Hawkins, Richard D.	Bedford	Lawrence

Name	City	County
Hay, Gene R.	Michigan City	La Porte
Hayes, Frank W.	Fairfield, Calif.	Lake
Hayes, Jesse D.	East Chicago	Lake
Hayes, Theodore R.	Muncie	Delaware-Blackford
Haymond, George M.	Warsaw	Kosciusko
Haymond, Joseph L.	Indianapolis	Marion
Haynes, John T.	Indianapolis	Marion
Hays, Everett L. (S)	Indianapolis	Marion
Haywood, John G.	Noblesville	Hamilton
Headley, Lloyd M.	Lebanon	Boone
Healey, Robert J.	Indianapolis	Marion
Healy, Cornelius E.	Evansville	Vanderburgh
Heard, Albert	Evansville	Vanderburgh
Heasty, Alfred R.	W. Lafayette	Tippecanoe
Heaton, Elton	Madison	Jefferson-Switzerland
Heck, Martin C.	Jasper	Dubois
Hedde, Eugene L.	Logansport	Cass
Hedgcock, Robert A.	Frankfort	Clinton
Hedrick, Philip W.	Indianapolis	Marion
Hehemann, William V.	Munster	Lake
Heid, George J., Jr.	Lafayette	Tippecanoe
Heilman, William C., Jr.	New Castle	Henry
Heilman, W. C., Sr. (S)	New Castle	Henry
Heimburger, Irvin L.	Evansville	Vanderburgh
Heimburger, Robert F.	Indianapolis	Marion
Heinlein, Carl L.	Danville	Hendricks
Heinrich, Weston A.	Evansville	Vanderburgh
Heiser, Ervin W.	Elkhart	Elkhart
Held, George A.	Jasper	Dubois
Helmen, Charles H.	Indianapolis	Marion
Helmen, Harry W. (S)	Rolling Prairie	St. Joseph
Helmer, John F.	South Bend	St. Joseph
Heminway, Norman L.	Elkhart	Elkhart
Hendeles, Frieda R.	Bluffton	Wells
Hendershot, Eugene L.	Evansville	Vanderburgh
Henderson, Francis G.	Indianapolis	Marion
Henderson, Norman C.	Michigan City	La Porte
Henderson, Ramon A.	Muncie	Delaware-Blackford
Henderson, Roscoe C.	Indianapolis	Marion
Hendricks, Fred A.	Indianapolis	Marion
Hendricks, John W.	Indianapolis	Marion
Hendrix, Charles E.	Vincennes	Knox
Henn, R. Anthony	Greenfield	Hancock
Henry, Alvin L.	Columbus	Bartholomew-Brown
Henry, Howard J.	Knox	Starke
Henry, Russell S.	Indianapolis	Marion
Hensler, Benton M.	Anderson	Madison
Hepburn, C. K.	Indianapolis	Marion
Hepner, Herman	Kendallville	Noble
Hepner, Herman S.	Bloomington	Owen-Monroe
Herd, Cloyn R.	Peru	Miami
Herendeen, Elbie V.	Rochester	Fulton
Heritier, C. Jules	Columbia City	Whitley
Hermayer, Stephen	Evansville	Vanderburgh
Hernandez, Antonio	Shelburn	Sullivan
Hernandez, I. C.	East Chicago	Lake
Herod, Gilbert	Viet Nam	Marion
Herr, John W. (S)	Tell City	Perry
Herrick, Charles L.	Akron	Fulton
Herrmann, Gordon T.	Evansville	Vanderburgh
Herrold, George W.	Lafayette	Tippecanoe
Hershberger, Philip G.	Fort Wayne	Allen
Hershey, Ernest A. (S)	Churubusco	Whitley
Herzberg, Milton	Clinton	Parke-Vermillion
Herzer, Clarence C.	Evansville	Vanderburgh
Hess, Paul P.	New Albany	Floyd
Hetherington, John A.	Terre Haute	Vigo
Hetman, Mitchell J.	Westville	La Porte
Hettle, Paul	Bloomington	Owen-Monroe
Heubi, John E.	Indianapolis	Marion
Hibbeln, Thomas J.	Indianapolis	Marion
Hibbs, William G.	Franklin	Johnson
Hibner, Dan W.	Richmond	Wayne-Union
Hibner, Nolan A.	Monticello	White
Hibner, Kermit Q.	Bloomington	Owen-Monroe
Hickam, John B.	Indianapolis	Marion
Hickman, Donald M.	Fort Wayne	Allen
Hickman, Jack W.	Indianapolis	Marion
Hicks, Murwyn L.	Indianapolis	Marion
Hicks, Wilbur P.	Indianapolis	Marion
Hicks, William K.	Gary	Lake
Hieber, Frank R.	Munster	Lake
Higgins, Jack W.	Kokomo	Howard
Higgins, James L.	Petersburg	Pike
Higgins, John R.	Floyds Knobs	Floyd
High, Ralph L.	Muncie	Delaware-Blackford
Hilbert, John W. (S)	South Bend	St. Joseph
Hildebrand, John O., Jr.	South Bend	St. Joseph
Hildebrand, William L.	Indianapolis	Marion
Hill, Gladys Marie	Richmond	Wayne-Union
Hill, Herbert N.	Indianapolis	Marion
Hill, James K.	Indianapolis	Marion
Hill, Kenneth G.	New Castle	Henry
Hill, Lloyd L.	Peru	Miami
Hill, Paul G.	Cambridge City	Wayne-Union
Hill, Robert E.	Yorktown	Delaware-Blackford
Hill, Theodore A.	South Bend	St. Joseph
Hill, Wallace C.	South Bend	St. Joseph
Hillenbrand, Charles	Michigan City	La Porte
Hillery, Robert L.	Fort Wayne	Allen
Hillis, Lowell J.	Logansport	Cass
Hillman, Marion W.	Westville	St. Joseph
Hilz, James M.	Indianapolis	Marion
Himebaugh, Gilbert J.	Evansville	Vanderburgh
Himelstein, N. Harvey	Indianapolis	Marion
Himler, James M.	Indianapolis	Marion
Hinchman, Jean F.	Parker	Delaware-Blackford
Hines, Archie V. (S)	Auburn	De Kalb
Hines, Don C.	Indianapolis	Marion
Hines, John H.	Auburn	De Kalb
Hippensteel, Harland	Auburn	De Kalb
Hippensteel, Russell R. (S)	Culver	Marshall
Hipskind, Richard E.	Fort Wayne	Allen
Hirsch, Herman L.	Mt. Vernon	Posey
Hirsch, Melvin L.	Hammond	Lake
Hisrich, Lloyd W.	Batesville	Ripley
Hobbs, Arthur A.	Evansville	Vanderburgh
Hobgood, James L., Jr.	Evansville	Vanderburgh
Hochhalter, Marian	Logansport	Cass
Hodgin, Phillip T.	Orleans	Orange
Hodonos, Phillip E.	Michigan City	LaPorte
Hodurski, Zigfield	Gary	Lake
Hoetzer, Eldore M.	New Haven	Allen
Hoffman, Arthur F.	Fort Wayne	Allen
Hoffman, Doris (S)	Goleta, Calif.	Knox
Hoffman, Herman	Indianapolis	Marion
Hoffman, Max N.	Covington	Fountain-Warren
Hofmann, J. William (S)	Indianapolis	Marion
Hogan, Michael A.	Indianapolis	Marion
Hogan, Thomas W.	Terre Haute	Vigo
Hogle, Frank D.	North Webster	Kosciusko
Hoham, Frederick D.	Portage	Porter
Hoit, Leonard	Gary	Lake
Holdeman, Lillian S.	South Bend	St. Joseph
Holdeman, Richard W.	South Bend	St. Joseph
Holden, Robert W.	Columbus	Bartholomew-Brown
Holladay, Lloyd J.	Lafayette	Tippecanoe
Holland, Philip T.	Bloomington	Owen-Monroe
Holland, William M.	Arlington, Va.	Marion
Hollenberg, Alfred E.	Hagerstown	Henry
Hollenberg, Edward L.	Winamac	Pulaski

Name	City	County
Holliday, Alfonso	Gary	Lake
Holman, Jerome E., Jr.	Indianapolis	Marion
Holman, Jerome E., Sr. (S)	Indianapolis	Marion
Holmes, Claude D. (S)	Coral Gables, Fla.	Clinton
Holmes, John L.	Muncie	Delaware-Blackford
Holsinger, Robert E.	Fort Wayne	Allen
Holtzman, Norman N.	Hines, Ill.	St. Joseph
Holtzman, Paul W.	Bloomington	Owen-Monroe
Honan, Paul R.	Lebanon	Boone
Hood, Ainslee A.	Indianapolis	Marion
Hoog, John M.	Indianapolis	Marion
Hooker, Donald J.	Ligonier	Noble
Hoopes, Jane M.	Evansville	Vanderburgh
Hoover, Dewey A.	Terre Haute	Vigo
Hoover, J. Guy	Evansville	Vanderburgh
Hoover, Joseph R.	Fort Wayne	Allen
Hoover, Peter B.	Boonville	Warrick
Hopkins, Bruce J.	Indianapolis	Marion
Hopkins, L. H.	Versailles	Ripley
Horlander, Fridolin	Jeffersonville	Clark
Horning, Richard R.	Logansport	Cass
Horst, William N.	Crown Point	Lake
Horswell, Richard G.	Bristol	Elkhart
Horswell, Richard R.	Lafayette	Tippecanoe
Horvath, George A.	Indianapolis	Marion
Horwitz, Thomas	Indianapolis	Marion
Hoskins, Phillip A.	Ann Arbor, Mich.	Lake
Hostetler, Carl M.	Goshen	Elkhart
Hostetter, Irwin S.	Muncie	Delaware-Blackford
Houser, D. Stanley	South Bend	St. Joseph
Houshmand, Cyrus	Bloomington	Owen-Monroe
Houston, Fred D.	Lawrenceburg	Dearborn-Ohio
Hovda, Richard B.	Evansville	Vanderburgh
How, Louis E.	South Bend	St. Joseph
Howard, Joseph D.	Culver	Marshall
Howard, William F.	Bloomington	Owen-Monroe
Howard, Wm. Harry (S)	Hammond	Lake
Howe, Fordyce L.	Fort Wayne	Allen
Howell, Arthur	Indianapolis	Marion
Howell, Joseph D.	Indianapolis	Marion
Hoyt, John M.	Kokomo	Howard
Hoyt, Lester H.	Indianapolis	Marion
Hoyt, Millard L.	Indianapolis	Marion
Hrisomalos, Frank N.	Bloomington	Owen-Monroe
Hubbard, Jesse D.	Indianapolis	Marion
Huber, Carl P.	Indianapolis	Marion
Huckleberry, Irvin E. (S)	Salem	Washington
Hudson, Arlington M.	Connersville	Fayette-Franklin
Hudson, Foster J. (S)	Indianapolis	Marion
Huebner, Gilbert D.	Bluffton	Wells
Huffman, Galen C.	Bluffton	Wells
Huffman, Verlin P.	S. Whitley	Whitley
Hughes, Anson F.	Lafayette	Tippecanoe
Hughes, Richard R.	Lafayette	Tippecanoe
Hughes, William B.	Waterloo	DeKalb
Huggins, Victor S.	Evansville	Vanderburgh
Hull, James E.	Lafayette	Tippecanoe
Hull, Joel I.	F.P.O., New York, N. Y.	Delaware-Blackford
Hull, Ronald H.	Indianapolis	Marion
Hummel, Russel M.	Marion	Grant
Hummons, Francis D.	Indianapolis	Marion
Humphrey, Edward M.	Covington	Fountain-Warren
Humphrey, Paul E.	Terre Haute	Vigo
Humphreys, Joe E.	Vincennes	Knox
Humphreys, John L.	Fort Wayne	Allen
Humphreys, John W.	Crawfordsville	Montgomery
Hunsberger, Walter G.	Lafayette	Tippecanoe
Hunt, Edgar J. (S)	Terre Haute	Vigo
Hunt, Gayle J.	Richmond	Wayne-Union
Hunter, Dean M.	W. Lafayette	Tippecanoe
Hunter, Donn R.	Greenfield	Hancock
Hunter, Frank P. (S)	Lafayette	Tippecanoe
Hunter, Lowell G.	Lawrenceburg	Dearborn-Ohio
Huoni, John S.	Jeffersonville	Clark
Hurley, James W.	Elkhart	Elkhart
Hurley, John R.	Daleville	Delaware-Blackford
Hurt, LaVerne B.	Delray Beach, Fla.	Marion
Hurteau, William W.	Indianapolis	Marion
Huse, William M.	Indianapolis	Marion
Husted, Robert G.	Munster	Lake
Hutchison, Donald R.	Fountain City	Wayne-Union
Hutson, Richard A.	Indianapolis	Marion
Hutto, William H.	Kokomo	Howard
Hyde, Carroll C. (S)	South Bend	St. Joseph

I

Imhof, Joseph D.	Muncie	Delaware-Blackford
Ing, Frederic Y. W.	Indianapolis	Marion
Ingram, Richard	Montpelier	Delaware-Blackford
Ingwell, Guy B.	Knox	Starke
Inlow, Paul M.	Shelbyville	Shelby
Inlow, Robert P.	Shelbyville	Shelby
Inlow, William D. (S)	Shelbyville	Shelby
Irish, Wilbur J.	Gary	Lake
Irmscher, George W.	Fort Wayne	Allen
Irmscher, Jane M.	Fort Wayne	Allen
Irvine, William O.	Indianapolis	Marion
Irwin, Glenn W., Jr.	Indianapolis	Marion
Isenogle, Kenneth F.	Fort Wayne	Allen
Iske, Paul G.	Indianapolis	Marion
Isler, Nathaniel C.	Jeffersonville	Clark
Iterman, George E. (S)	New Castle	Henry
Ivy, John H.	Elkhart	Elkhart

J

Jackson, Charles E.	Bluffton	Wells
Jackson, Dean B.	Hartford City	Delaware-Blackford
Jackson, Howard C.	Madison	Jefferson-Switzerland
Jackson, James W. (S)	Indianapolis	Marion
Jackson, John F.	Fort Wayne	Allen
Jackson, John K.	Aurora	Dearborn-Ohio
Jackson, Kathryn A.	Zionsville	Boone
Jacobo, Miguel J.	East Chicago	Lake
Jacobs, E. Robert	Columbus	Bartholomew-Brown
Jacobs, Rene M.	Coatesville	Putnam
Jacqmain, Ralph J.	Vincennes	Knox
Jahns, Albin A.	Gary	Lake
James, Charles E.	Indianapolis	Marion
James, Thomas, Jr.	Huntington	Huntington
Janes, R. Grant	Connersville	Fayette-Franklin
Janicki, Robert S.	Indianapolis	Marion
Jankowski, Ernest B.	South Bend	St. Joseph
Jaquith, Orville S. (S)	Indianapolis	Marion
Jarrett, John C.	Marion	Grant
Jarrett, Paul E.	Anderson	Madison
Jay, Arthur C.	Indianapolis	Marion
Jay, Arthur N.	Indianapolis	Marion
Jay, James M.	Indianapolis	Marion
Jehanyar, M. Ali	Monticello	White
Jenkins, Robert E.	Indianapolis	Marion
Jennings, Frank L. (S)	Indianapolis	Marion
Jett, Clyde W.	Seelyville	Vigo
Jewell, George M.	Kokomo	Marion
Jewett, Joe H.	Indianapolis	Howard

Name	City	County
Jobes, James E.	Indianapolis	Marion
Johns, David R. (S)	Beloit, Wis.	Lake
Johns, Nicholas C.	South Bend	St. Joseph
Johnson, Arnold L.	Gary	Lake
Johnson, Earl H.	Indianapolis	Marion
Johnson, Edward M.	Terre Haute	Vigo
Johnson, George M.	Richmond	Wayne-Union
Johnson, Herbert S.	Lafayette	Tippecanoe
Johnson, James B.	Greencastle	Putnam
Johnson, Jerome M.	Jeffersonville	Clark
Johnson, Lonnie B. (S)	Gary	Lake
Johnson, Paul D., Jr.	Terre Haute	Vigo
Johnson, Robert D.	Madison	Jefferson-Switzerland
Johnson, Stephen L.	Evansville	Vanderburgh
Johnson, Thomas W.	Indianapolis	Marion
Johnson, Victor	Evansville	Vanderburgh
Johnson, William A.	North Vernon	Jackson-Jennings
Johnson, William H.	Gary	Lake
Johnson, William V.	New Albany	Floyd
Johnston, Richard M.	Fort Wayne	Allen
Johnston, Robert G. (S)	Huntington	Huntington
Jolly, Wesley P. (S)	Richland	Spencer
Jones, Albert T.	Anderson	Madison
Jones, Allen W.	Indianapolis	Marion
Jones, Charles A.	Franklin	Johnson
Jones, David E.	Indianapolis	Marion
Jones, David G.	Anderson	Madison
Jones, David H.	Charlestown	Clark
Jones, David M.	Lafayette	Tippecanoe
Jones, Eli S. (S)	Hammond	Lake
Jones, Francis P.	Indianapolis	Marion
Jones, George L.	Indianapolis	Marion
Jones, Gordon C.	Indianapolis	Marion
Jones, Horace E.	Anderson	Madison
Jones, J. Carl	Logansport	Cass
Jones, King S.	Michigan City	La Porte
Jones, Milton F.	Marion	Grant
Jones, Richard A.	Indianapolis	Marion
Jones, Robert B.	Elkhart	Elkhart
Jontz, Joe G.	Fort Wayne	Allen
Jontz, Jon P.	Indianapolis	Marion
Jontz, Richard L.	Fort Wayne	Allen
Jordan, Leo E.	Lynn	Randolph
Jordan, Richard A.	Corydon	Harrison-Crawford
Joseph, Rex M.	Indianapolis	Marion
Jowitt, Richard H.	Indianapolis	Marion
Joyner, John E.	Indianapolis	Marion
Judd, Donald R.	Muncie	Delaware-Blackford
Judd, Russell L.	Indianapolis	Marion
Judson, Walter E.	Indianapolis	Marion
Juergens, Richard B.	Fort Wayne	Allen
Jurgensen, Walter T.	Fort Wayne	Allen
Justin, Renate G.	Terre Haute	Vigo

K

Kabel, Robert N.	Terre Haute	Vigo
Kahler, Maurice V. (S)	Indianapolis	Marion
Kahn, Alexander J.	Indianapolis	Marion
Kahn, Howard L.	Indianapolis	Marion
Kaiser, James L.	Indianapolis	Marion
Kalker, Morton	Muncie	Delaware-Blackford
Kalsbeck, John E.	Indianapolis	Marion
Kaltenthaler, Albert	Gary	Lake
Kamen, Jack M.	Gary	Lake
Kamm, Bernard A.	South Bend	St. Joseph
Kammen, Leo	Indianapolis	Marion
Kammer, Grace C.	Muncie	Delaware-Blackford
Kammer, Walter F.	Muncie	Delaware-Blackford
Kantzer, Floyd B. (S)	Garrett	De Kalb
Karberg, Richard J.	Lafayette	Tippecanoe
Karn, John W.	South Bend	St. Joseph
Karnafel, Eugene T.	Logansport	Cass
Karol, Herbert J.	Fort Wayne	Allen
Karsell, Philip R.	Indianapolis	Marion
Karsell, William A.	Indianapolis	Marion
Kasting, Gerald	Bedford	Lawrence
Katterjohn, James C.	Indianapolis	Marion
Kauffman, Harley M. (S)	Evansville	Vanderburgh
Kaufman, Julian R.	Fort Wayne	Allen
Keating, John U.	Elkhart	Elkhart
Kebel, Arthur P.	Indianapolis	Marion
Keck, Carleton A.	Fort Wayne	Allen
Keeling, Forrest E.	Portland	Jay
Keenan, George B.	Indianapolis	Marion
Keever, Charles H. (S)	Indianapolis	Marion
Kellar, Philip E.	Hobart	Lake
Keller, Theodore A.	Valparaiso	Porter
Kelley, William E.	Bloomington	Owen-Monroe
Kelly, Don E.	Indianapolis	Marion
Kelly, George G.	Munster	Lake
Kelly, John B.	Evansville	Vanderburgh
Kelly, Wendell C.	Anderson	Madison
Kelsey, Lawrence E.	Kewanna	Fulton
Kelsey, Robert M., Jr.	La Porte	La Porte
Kemp, John T.	Michigan City	La Porte
Kemp, W. Alfred	Bourbon	Marshall
Kempf, Gerald F. (S)	Rockville	Parke-Vermillion
Kendall, Forest M.	Nappanee	Elkhart
Kendrick, Frank J.	Gary	Lake
Kendrick, William M.	Mooresville	Morgan
Kennedy, Hunter F.	Indianapolis	Marion
Kennedy, Joseph T.	Indianapolis	Marion
Kennedy, Myron S.	Goshen	Elkhart
Kennedy, Walter U. (S)	New Castle	Henry
Kenney, David B.	Indianapolis	Marion
Kenney, Francis D.	Munster	Lake
Kenoyer, Wilbur L.	Scott AFB, Ill.	Marion
Kent, Richard N.	Fort Wayne	Allen
Kenyon, C. Emil	Cambridge City	Wayne-Union
Kenzler, Jack I.	Indianapolis	Marion
Keough, Thomas F.	Warsaw	Kosciusko
Kephart, S. Bruce	Bluffton	Wells
Kepler, Robert W.	La Porte	La Porte
Keplinger, James E.	W. Lafayette	Tippecanoe
Kepner, Robert S.	Anderson	Madison
Kerlin, Joseph C.	Danville	Hendricks
Kern, Clarence G.	Lebanon	Boone
Kerr, Charlotte H.	Michigan City	La Porte
Kerr, Donald M.	Bedford	Lawrence
Kerr, Harry R.	Indianapolis	Marion
Kerr, John E.	Michigan City	La Porte
Kerrigan, John F.	Michigan City	La Porte
Kerrigan, Robert L. (S)	Michigan City	La Porte
Kerrigan, William F.	Connersville	Fayette-Franklin
Kershner, Charles R.	Marion	Grant
Keseric, N. E.	French Lick	Orange
Kesim, Mufit H.	Elkhart	Elkhart
Kessler, Robert B.	Evansville	Vanderburgh
Ketcham, Jane M. (S)	Indianapolis	Marion
Ketcham, John S. (S)	Rossville	Clinton
Keyes, Robert C.	Fort Wayne	Allen
Khaton, Odessa M.	Gary	Lake
Kidd, James G. (S)	Jefferson, Wis.	Wabash
Kidder, Orva T.	Fort Wayne	Allen
Kiechle, Frederick L.	Evansville	Vanderburgh
Kieffer, William J.	South Bend	St. Joseph
Kielton, Melvyn J.	Elkhart	Elkhart
Kiely, John T.	Anderson	Madison
Kilgore, Byron W.	Ft. Wayne	Allen
Kilmer, Warren L.	Portage	Porter
Kim, Joon S.	Muncie	Delaware-Blackford

Name	City	County
Kim, Ki Ho.	W. Orange, N. Jersey	Marion
Kim, Young D. (S)	Beech Grove	Marion
Kim, Young S.	Whiting	Lake
Kimbrough, Robert F.	Fort Wayne	Allen
Kime, Charles E.	Richmond	Wayne-Union
Kime, Edwin N. (S)	Bloomington	Marion
Kimmel, George E.	Evansville	Vanderburgh
Kincaid, Raymond K.	Tipton	Tipton
Kincaid, Robert S.	Evansville	Vanderburgh
Kindell, Hurschell D.	New Richmond	Montgomery
KinKade, Paul T.	New Castle	Henry
King, Charles R.	Anderson	Madison
King, Harold	Indianapolis	Marion
King, Jay M.	Logansport	Cass
King, Robert D.	Indianapolis	Marion
King, Robert W.	Cedar Lake	Lake
Kingsbury, John K. (S)	Indianapolis	Marion
Kinneman, Robert E.	Greenfield	Hancock
Kintner, Burton E.	Elkhart	Elkhart
Kinzer, LeRoy D.	Markle	Wells
Kirby, Ted C.	Greenfield	Hancock
Kirkhoff, Paul J.	Indianapolis	Marion
Kirshman, Forrest E.	Muncie	Delaware-Blackford
Kirtley, James M.	Crawfordsville	Montgomery
Kirtley, Robert W.	Danville	Hendricks
Kirtley, William R.	Indianapolis	Marion
Kissel, Wesley A.	Indianapolis	Marion
Kissinger, Knight L.	Angola	Steuben
Kistler, James J.	La Porte	La Porte
Kistner, Arthur W.	Elkhart	Elkhart
Kitt, Walter	Munster	Lake
Kitterman, Harry E.	Indianapolis	Marion
Klain, Benjamin V.	Indianapolis	Marion
Klamer, Charles H.	Jasper	Dubois
Klassen, Otto D.	Elkhart	Elkhart
Klatch, Ben Z.	Lafayette	Tippecanoe
Kleifgen, William A.	Fort Wayne	Allen
Kleindorfer, Roscoe L.	Evansville	Vanderburgh
Kleopfer, Ronald G.	Fort Wayne	Allen
Klepfer, Jefferson F.	Richmond	Wayne-Union
Klepinger, Harry E.	Lafayette	Tippecanoe
Klingerman, John J.	Indianapolis	Marion
Klooze, Kenneth W.	Fort Wayne	Allen
Klutinoty, George II	Indianapolis	Marion
Kmak, Chester J.	East Chicago	Lake
Kneidel, John H.	Indianapolis	Marion
Knight, Lewis W.	Fort Wayne	Allen
Knochel, Wayne L.	Rochester	Fulton
Knode, Kenneth T. (S)	South Bend	St. Joseph
Knotts, Halleck S.	Columbus	Bartholomew-Brown
Knotts, Slater	Columbus	Jackson-Jennings
Knowles, Charles Y.	Indianapolis	Marion
Knowles, Robert P.	Indianapolis	Marion
Ko, Richard C. B.	Gaston	Delaware-Blackford
Kobak, Alfred J., Jr.	Valparaiso	Porter
Kobrin, Meyer W.	Gary	Lake
Koch, Edwin F., Jr.	Muncie	Delaware-Blackford
Koch, Elmer L.	Danville	Hendricks
Koch, Howard W.	Winchester	Randolph
Kochell, Richard L.	Lafayette	Tippecanoe
Koehler, Elmer G.	Elkhart	Elkhart
Koenig, Robert L.	Valparaiso	Porter
Kohlstaedt, Karl C.	Indianapolis	Marion
Kohlstaedt, Kenneth G.	Indianapolis	Marion
Kohne, Gerald J.	Decatur	Adams
Kohne, Robert W.	Lafayette	Tippecanoe
Kolanko, Leon A.	Hammond	Lake
Kolettis, John G.	Gary	Lake
Kooiker, John E.	Indianapolis	Marion
Koons, Karl M. (S)	Indianapolis	Marion
Koontz, William A.	Gas City	Grant
Kopanko, Bernard F.	East Chicago	Lake
Kopcha, Joseph E.	Gary	Lake
Kopecky, Robert R.	Indianapolis	Marion
Kopp, William R.	Anderson	Madison
Koransky, David S.	Hammond	Lake
Korn, Jerome M.	Gary	Lake
Kornafel, L. H.	Indianapolis	Marion
Koss, K. William	Muncie	Delaware-Blackford
Kott, Alexander	Munster	Lake
Kourany, Edgar	Mooresville	Morgan
Kourany, Oscar	Mooresville	Morgan
Kraft, Bennett	Indianapolis	Marion
Kraning, Kenneth K.	Kewanna	Fulton
Kreitl, Dorothy R.	Richmond	Wayne-Union
Kremers, George A.	Kokomo	Howard
Kremp, Richard E.	Indianapolis	Marion
Kresler, Leon E.	Kentland	Newton
Kress, James W.	Muncie	Delaware-Blackford
Krieble, William W.	Terre Haute	Vigo
Kriel, William B.	Indianapolis	Marion
Krsek, Archie J.	Hobart	Lake
Krueger, John E.	Fort Wayne	Allen
Krueger, John E.	South Bend	St. Joseph
Krueger, Robert B.	Columbus	Bartholomew-Brown
Krumholz, Richard A.	Indianapolis	Marion
Kruse, Walter E. (S)	Fort Wayne	Allen
Kubik, Francis J.	Michigan City	LaPorte
Kubley, James D.	Plymouth	Marshall
Kudele, Louis T.	Whiting	Lake
Kuhn, Arthur J.	Munster	Lake
Kuhn, Frederick L.	South Bend	St. Joseph
Kuhn, Hedwig S. (S)	Munster	Lake
Kuhn, Robert W.	Wilkinson	Hancock
Kuipers, Fred M.	Lafayette	Tippecanoe
Kunkler, Arnold W.	Terre Haute	Vigo
Kunkler, Joseph (S)	Terre Haute	Vigo
Kunkler, William C. (S)	Terre Haute	Vigo
Kuntz, Herman W.	Indianapolis	Marion
Kurlander, Gerald J.	Indianapolis	Marion
Kurtz, Fred B. (S)	Indianapolis	Marion
Kurtz, Philip L.	Indianapolis	Marion
Kurtz, William A.	Tipton	Tipton
Kwitny, Isadore J.	Indianapolis	Marion

L

LaBier, Clarence R., Jr.	Terre Haute	Vigo
Lackey, John T.	Hines, Ill.	Marion
Ladig, Donald S.	Fort Wayne	Allen
LaDine, Clarence B.	Indianapolis	Marion
LaDuron, Jules F. (S)	Muncie	Delaware-Blackford
LaFollette, Donald R.	New Albany	Floyd
LaFollette, Forrest R.	Hammond	Lake
LaFollette, Robert E.	New Albany	Floyd
Lahr, Richard E.	Marion	Grant
Laker, Gene C.	Fort Wayne	Allen
Laker, Richard J.	Fort Wayne	Allen
Lamb, Emmett B.	Indianapolis	Marion
Lamb, J. Leonard	South Bend	St. Joseph
Lamb. Russell W.	Indianapolis	Marion
Lamber, Chet K.	Indianapolis	Marion
Lamey, Paul T.	Anderson	Madison
Lamkin, E. Henry, Jr.	Indianapolis	Marion
Lampe, Elfred H.	Fort Wayne	Allen
Lancet, Robert O.	Terre Haute	Vigo
Land, Richard N.	Anderson	Madison
Landis, Charles B.	Lafayette	Tippecanoe
Landon, David J.	Union City	Randolph
Lands, Robert M.	Portage	Porter
Landwehr, Alfons	Indianapolis	Marion
Lane, C. Elaine	Indianapolis	Marion
Lane, William H.	South Bend	St. Joseph
Lang, Erich K.	Indianapolis	Marion
Lang, Jay W.	Indianapolis	Marion
Langohr, John L.	Columbia City	Whitley

Name	City	County
Langsam, Charles L.	Evansville	Vanderburgh
Lanman, John U.	Munster	Lake
Lanning, R. Adrian	Noblesville	Hamilton
Lansford, Kenneth G.	La Porte	La Porte
Largaespada, Manuel	Indianapolis	Marion
Larmore, Joseph L.	Anderson	Madison
Larrabee, James F.	Munster	Lake
Larzelere, Henry B.	Marion	Grant
Larson, Goyt O.	La Porte	La Porte
LaSalle, Richard M.	Wabash	Wabash
LaSalle, Robert M., Jr.	Wabash	Wabash
LaSalle, Robert M., Sr.	Wabash	Wabash
Lashmet, Michael H.	Indianapolis	Marion
Lasich, Anthony R.	Indianapolis	Marion
Laubscher, Clarence	Evansville	Vanderburgh
Laudeman, Walter A.	Elwood	Madison
Lautz, Herbert A.	Munster	Lake
Lavengood, Russell W.	Marion	Grant
Lawler, George F.	Venice, Florida	Marion
Lawler, John F.	Evansville	Vanderburgh
Lawrance, Kingsley	Indianapolis	Marion
Lawrence, Gene C.	Indianapolis	Marion
Lawrence, James M.	Indianapolis	Marion
Lawrence, Joseph C.	Evansville	Vanderburgh
Lawson, Allan J.	Indianapolis	Marion
Lawson, Lawrence J.	Muncie	Delaware-Blackford
Laycock, Richard M.	Fort Wayne	Allen
Leahey, J. H.	Gary	Lake
Leahy, Howard J.	Pendleton	Madison
Leak, Robert H.	Boswell	Benton
Leasure, J. Kent (S)	Indianapolis	Marion
Leatherman, Harter L.	Indianapolis	Marion
Lebioda, Henry S.	Gary	Lake
Lee, Glen Ward	Richmond	Wayne-Union
Lee, James	Terre Haute	Vigo
Lee, John M. (S)	Rushville	Rush
Lee, John W.	Fort Wayne	Allen
Lee, Robert Y.	Valparaiso	Porter
Leffel, James M.	Indianapolis	Marion
Leffler, William T.	Indianapolis	Marion
Lehman, Evan L.	Indianapolis	Marion
Lehman, Kenneth M.	Topeka	LaGrange
Lehmberg, Otto F. C.	Columbia City	Whitley
Leibundguth, Henry	Evansville	Vanderburgh
Leich, Charles F.	Evansville	Vanderburgh
Leinbach, Earl R.	Hamlet	Starke
Leipold, Jon D.	Norfolk, Va.	Delaware-Blackford
LeMaster, Theodore R.	Indianapolis	Marion
Leming, Ben L.	Fort Wayne	Allen
Lempke, Lloyd W.	Lafayette	Tippecanoe
Lenk, George G.	Fort Wayne	Allen
Lenox, Jack	Lebanon	Boone
Lenyo, Ludimere	Terre Haute	Vigo
Leon, Mario	Holland	Dubois
Leroy, Alvin G.	Alexandria	Madison
Leser, Ralph U.	Indianapolis	Marion
Lessure, Alfred P.	Evansville	Vanderburgh
Lester, Vern L.	Mishawaka	St. Joseph
Lett, Emory B.	Loogootee	Daviess-Martin
Lett, James C.	Greencastle	Putnam
Levatin, Bernard I.	South Bend	St. Joseph
Levi, Leon	Indianapolis	Marion
Levin, Eli L. (S)	East Chicago	Lake
Levkoff, Abner H.	South Bend	St. Joseph
Lewis, George N.	Gary	Lake
Lewis, James F.	Liberty	Wayne-Union
Lewis, Lucien A.	Gary	Lake
Lewis, Paul S.	Indianapolis	Marion
Lewis, R. Earl	Indianapolis	Marion
Lewis, Robert J.	Lawrence	Marion
Ley, Glen D.	Bedford	Lawrence
Libbert, Edwin L.	Columbus	Bartholomew-Brown
Libunao, Artemio S.	Versailles	Ripley
Lichtenberg, Melvin	Indianapolis	Marion
Liddell, Charles K.	Michigan City	La Porte
Lidikay, Edward C.	Indianapolis	Marion
Life, Homer L.	New Castle	Henry
Lind, Jaap J.	Lafayette	Tippecanoe
Lindauer, David H.	Princeton	Gibson
Lindenborg, Paul G.	Indianapolis	Marion
Lindsay, Hamlin B.	Washington	Daviess-Martin
Ling, John F.	Richmond	Wayne-Union
Lingeman, Byron N. (S)	Crawfordsville	Montgomery
Lingeman, Raleigh E.	Indianapolis	Marion
Link, Charles W., Jr.	Greenwood	Johnson
Link, Goethe (S)	Indianapolis	Marion
Link, William C.	Bloomington	Owen-Monroe
Linson, John C.	Seymour	Jackson-Jennings
Lionberger, John R.	South Bend	St. Joseph
Lipschutz, Harold	Gary	Lake
Lipsey, Alfred J.	Gary	Lake
Liss, Emanuel C.	South Bend	St. Joseph
Littlefield, Paul A.	Indianapolis	Marion
Littlefield, Shirley D.	Indianapolis	Marion
Litzenberger, Sam W.	Anderson	Madison
Llamas, Dominardo	North Judson	Pulaski
Llorente, Teodulo M.	Griffith	Lake
Lloyd, Frank P.	Indianapolis	Marion
Lloyd, Joe R.	Noblesville	Hamilton
Lloyd, Robert P.	Fort Wayne	Allen
Lo, Loretta S. Y.	Terre Haute	Vigo
Lockhart, Jack M.	Connersville	Fayette-Franklin
Lockhart, Philip B.	South Bend	St. Joseph
Loehr, William M.	Indianapolis	Marion
Loewenstein, Werner L.	Terre Haute	Vigo
Logan, James Z.	Richmond	Wayne-Union
Logan, Richard S.	Fort Wayne	Allen
Lohman, Robert M.	Fort Wayne	Allen
Lohoff, Lewis C.	Tell City	Perry
Loh, Hwei-Ya (Chang)	Gary	Lake
Loh, Wei-Ping	Gary	Lake
Long, Keith J.	Hammond	Lake
Long, Malcolm D.	Indianapolis	Marion
Long, Max R.	Marion	Grant
Long, Michael T.	San Diego, Calif.	Marion
Long, Paul L.	Anderson	Madison
Longshore, Robert E.	Kokomo	Howard
Longstaff, John P.	Evansville	Vanderburgh
Lonngren, Dudley H.	Marion	Grant
Loomis, Charles H.	Richmond	Wayne-Union
Loomis, Norman S.	Indianapolis	Marion
Loop, Frederick A.	Lafayette	Tippecanoe
Lopez, Alfonso	Portland	Jay
Lopez, Filemon P.	Dyer	Lake
Lopez, Santiago A.	Gary	Lake
Lord, Glenn C.	Indianapolis	Marion
Lord, Thomas J.	Colorado Springs, Colo.	Marion
Lorenty, Thaddeus B.	Gary	Lake
Lorman, James G.	Fort Wayne	Allen
Louden, Robert W.	Indianapolis	Marion
Loudermilk, Jack L.	Fort Wayne	Allen
Love, George N.	Indianapolis	Marion
Love, V. Logan	Marion	Grant
Lovell, Martin H. (S)	Gary	Lake
Lovett, Harvey D.	Zionsville	Boone
Loving, Jury B.	New Goshen	Vigo
Lowe, John C.	Indianapolis	Marion
Lozow, David	Indianapolis	Marion
Lucas, Clarence A., Jr.	Indianapolis	Marion
Luce, John W.	Michigan City	LaPorte
Luckett, Coen L. (S)	Terre Haute	Vigo
Ludwig, Paul E.	Crawfordsville	Montgomery
Lukemeyer, George T.	Indianapolis	Marion
Lukemeyer, St. John	Jasper	Dubois
Lundblad, Wilfred M.	Bloomington	Owen-Monroe

Name	City	County
Lundeberg, Ralph A.	Griffith	Lake
Lundt, Milo O.	Elkhart	Elkhart
Lunsford, Thomas E.	Indianapolis	Marion
Luros, J. Theodore	Indianapolis	Marion
Luther, William C.	Elkhart	Elkhart
Lutz, Andreas L.	Hammond	Lake
Lutz, Georgianna	Gary	Lake
Luzadder, John E.	New Carlisle	St. Joseph
Lybrook, William B.	Indianapolis	Marion
Lynch, Harold D.	Evansville	Vanderburgh
Lynch, William A.	APO, New York, N. Y.	Marion
Lynn, Gene E.	Indianapolis	Marion
Lyon, Florence M.	Portland	Jay
Lyon, William C.	Fort Wayne	Allen
Lyons, L. Mason	Terre Haute	Vigo
Lyons, Robert E.	Bloomington	Owen-Monroe
Lytwakiwsky, Anatol	Gary	Lake
M		
MacDonell, Eldred H.	South Bend	St. Joseph
MacDougall, John D.	Indianapolis	Marion
MacKenzie, Pierce	Evansville	Vanderburgh
MacLeod, John K.	South Bend	St. Joseph
MacQuigg, David E.	Edinburg	Johnson
McAdams, Hugh B.	Lafayette	Tippecanoe
McAdams, Robert	Lafayette	Tippecanoe
McAfee, James R.	Lebanon	Boone
McAleese, George B.	Terre Haute	Vigo
McAlpine, Richard J.	Indianapolis	Marion
McAree, Francis E., Jr.	Indianapolis	Marion
McArt, Bruce A.	Elkhart	Elkhart
McAtee, Ott B.	Madison	Jefferson-Switzerland
McBride, James S. (S)	Indianapolis	Marion
McBride, Noel S.	Terre Haute	Vigo
McCalla, Charles X.	Paoli	Orange
McCallister, John W.	Fort Wayne	Allen
McCallister, Larry L.	Muncie	Delaware-Blackford
McCallum, Donald C.	Indianapolis	Marion
McCallum, Joseph T. C. (S)	Indianapolis	Marion
McCallum, Robert N.	Indianapolis	Marion
McCammon, Robert E.	Indianapolis	Marion
McCarthy, Daniel F., Jr.	Indianapolis	Marion
McCartney, Donald H.	Indianapolis	Marion
McCarty, Virgil	Princeton	Gibson
McCaslin, Charles W.	Bluffton	Wells
McClain, Edwin S.	Indianapolis	Marion
McClain, Marvin L.	Scottsburg	Scott
McClary, Charles W.	Bloomington	Owen-Monroe
McClintock, James A.	Muncie	Delaware-Blackford
McClure, Clark	Knox	Starke
McClure, Glen	Sullivan	Sullivan
McClure, Morris E.	Union City	Randolph
McClure, Stanley E.	Monon	White
McClure, Warren N.	Kokomo	Howard
McConnell, William C.	Sunman	Ripley
McCool, Joseph H.	Evansville	Vanderburgh
McCormack, Lloyd L.	Jamestown, Tenn.	Steuben
McCormick, Charles O., Jr.	Indianapolis	Marion
McCormick, Hubert D. (S)	Vincennes	Knox
McCormick, Wilbur C.	Brazil	Clay
McCoy, Roy R.	Fort Wayne	Allen
McCraley, William J.	South Bend	St. Joseph
McCrea, Fred R.	Terre Haute	Vigo
McCullough, Henry G.	Columbus	Bartholomew-Brown
McCullough, James Y.	New Albany	Floyd
McDonald, Frank C.	New Castle	Henry
McDonald, Joseph D.	Evansville	Vanderburgh
McDonald, Virgil G. (S)	Anderson	Madison
McDonald, Walter E.	Gary	Lake
McDougal, Robert A.	Indianapolis	Marion
McDowell, Fletcher W.	Muncie	Delaware-Blackford
McDowell, George A.	Fort Wayne	Allen
McDowell, Mordecai M.	Vincennes	Knox
McEachern, Cecil G.	Fort Wayne	Allen
McElroy, James S.	New Castle	Henry
McElroy, James T.	Indianapolis	Marion
McElroy, Robert S.	Princeton	Gibson
McEwen, James W.	Terre Haute	Vigo
McFadden, James M.	Lafayette	Tippecanoe
McFarland, Corley B.	South Bend	St. Joseph
McGarvey, William K.	Indianapolis	Marion
McGrath, Michael F.	Indianapolis	Marion
McGue, Frank J.	Michigan City	La Porte
McGuire, D. F. (S)	East Chicago	Lake
McIlroy, Richard J.	Richmond	Wayne-Union
McIndoo, Ralph E. (S)	Kokomo	Howard
McInerney, Gerald T.	Michigan City	LaPorte
McIntire, Clarence R.	Bloomington	Owen-Monroe
McIntosh, Wilbert	Riley	Vigo
McIntyre, Charles J. (S)	Indianapolis	Marion
McIntyre, James M.	Indianapolis	Marion
McKechnie, Robert K.	Jeffersonville	Clark
McKee, Harry G.	Rushville	Rush
McKee, Roy G.	New Castle	Henry
McKeeman, Donald H.	Fort Wayne	Allen
McKeever, Joseph W.	Marion	Grant
McKinley, A. David	Indianapolis	Marion
McKinley, Joseph	Lafayette	Tippecanoe
McKinney, Donald L.	Otterbein	Benton
McKittrick, Jack	Washington	Daviess-Martin
McLaren, Daniel E.	Indianapolis	Marion
McLaughlin, Gordon C.	Terre Haute	Vigo
McLaughlin, James R.	Warren	Huntington
McMahan, Virgil C.	Tampa, Fla.	Knox
McMeel, James	South Bend	St. Joseph
McNabb, Richard C.	Carthage	Rush
McNaughton, Lawrence	Washington	Daviess-Martin
McNeely, Matthew J.	Dillsboro	Dearborn-Ohio
McNutt, Cyrus C.	Beech Grove	Marion
McPherson, Richard C.	Lafayette	Tippecanoe
McPherson, Thomas C.	Evansville	Vanderburgh
McPike, Joseph D.	Bedford	Lawrence
McQuade, John A.	South Bend	St. Joseph
McQuiston, Ralph J.	Indianapolis	Marion
McTurnan, Robert W.	Indianapolis	Marion
McVey, Clarence A. (S)	Hammond	Lake
McWilliams, William B. (S)	Liberty	Wayne-Union
Machledt, John H.	Greenwood	Johnson
Mackel, Frederick O.	Fort Wayne	Allen
Mackey, John E.	Indianapolis	Marion
Macri, Paul A.	Mishawaka	St. Joseph
Macy, George W.	Columbus	Bartholomew-Brown
Madlang, Rodolfo M.	Munster	Lake
Madden, Robert J.	Indianapolis	Marion
Mader, John H.	Richmond	Wayne-Union
Madtson, A. Ricks	Indianapolis	Marion
Magennis, Herbert L. (S)	Indianapolis	Marion
Mahank, Camiel C.	Mishawaka	St. Joseph
Makovsky, Theodore	Valparaiso	Porter
Malcolm, Russell L.	Richmond	Wayne-Union
Malloy, Francis E., Jr.	Indianapolis	Marion
Malone, Leander A.	Terre Haute	Vigo
Malott, Fred R.	Converse	Grant
Malouf, Stephen D. (S)	Bloomington, Ill.	Miami
Manalo, Francisco S.	Gary	Lake
Manders, Karl L.	Indianapolis	Marion
Manhart, Doyle B.	Sheridan	Hamilton
Manifold, Harold M.	Bloomington	Owen-Monroe
Manion, Marlow W.	Indianapolis	Marion

Name	City	County
Mankin, William J.	Terre Haute	Vigo
Manley, Floyd	Hammond	Lake
Mann, Mortimer	Indianapolis	Marion
Mann, Richard E.	Fort Wayne	Allen
Manning, George C.	Fort Wayne	Allen
Manning, K. Randolph	Indianapolis	Marion
Mannion, Rodney A.	Michigan City	La Porte
Manship, C. Stanley	Paoli	Orange
Manzie, Michael W.	Indianapolis	Marion
Maple, James B. (S)	Sullivan	Sullivan
Marchand, Edwin V.	Haubstadt	Gibson
Marchant, Clarence H.	Bloomington	Owen-Monroe
Marcus, Morris C. (S)	Gary	Lake
Maris, Lee J.	Attica	Fountain-Warren
Mark, George A.	Elkhart	Elkhart
Markle, Joseph G.	Hobart	Lake
Marks, Howard H.	Huntington	Huntington
Marks, John S., Jr.	Indianapolis	Marion
Marks, Ora L.	East Chicago	Lake
Marks, Salvo P.	Hammond	Lake
Markstone, David H.	Portsmouth, Va.	Marion
Maroc, James A.	Munster	Lake
Marquinez, Adoracion	East Chicago	Lake
Marquinez, Apolinario A.	Highland	Lake
Marquis, Gordon	South Bend	St. Joseph
Marr, Griffith	Columbus	Bartholomew-Brown
Marsh, Carl M.	Indianapolis	Marion
Marsh, George W.	Lafayette	Tippecanoe
Marsh, M. Frederick	Fort Wayne	Allen
Marshall, Albert L., Jr.	Indianapolis	Marion
Marshall, Caesar L.	Fort Wayne	Allen
Marshall, Cavins R. (S)	Indianapolis	Marion
Marshall, Millard R.	Gary	Lake
Marshall, Thos. J. (S)	Charlestown	Clark
Marshall W. J., Jr.	Munster	Lake
Marske, Robert L.	Michigan City	La Porte
Martin, Allen S.	Boonville	Warrick
Martin, Charles F., Jr.	South Bend	St. Joseph
Martin, Charles F.	Elkhart	Elkhart
Martin, Floyd S.	Goshen	Elkhart
Martin, Hugh E.	Indianapolis	Marion
Martin, Joe M.	W. Lafayette	Tippecanoe
Martin, Loren H.	Indianapolis	Marion
Martin, Noel J.	Shipshewana	LaGrange
Martin, Paul H.	Elkhart	Elkhart
Martin, Samuel W.	Corydon	Harrison-Crawford
Martino, Robert S.	Gary	Lake
Martinov, William E.	South Bend	St. Joseph
Martirez, N. A.	East Chicago	Lake
Martz, Bill L.	Indianapolis	Marion
Martz, Carl D.	Indianapolis	Marion
Marvel, Howard R.	Lafayette	Tippecanoe
Marvel, James A.	Evansville	Vanderburgh
Marvel, Robert J.	Indianapolis	Marion
Masbaum, Ned P.	Indianapolis	Marion
Maschmeyer, Robert H.	Logansport	Cass
Mason, Bernard A.	South Bend	St. Joseph
Mason, Donald G.	Angola	Steuben
Mason, Earl	Gary	Lake
Mason, Everett E.	Evansville	Vanderburgh
Mason, John C.	Munster	Lake
Mason, Lester M.	Terre Haute	Vigo
Mason, Richard L.	Hammond	Lake
Massanari, Walter S.	Millersburg	Elkhart
Masters, John M.	Indianapolis	Marion
Masters, Robert J. (S)	Indianapolis	Marion
Mastrangelo, M. J.	Fort Wayne	Allen
Mather, Charles R.	Lafayette	Tippecanoe
Mather, Glenn B.	Bloomington	Owen-Monroe
Mather, J. Winford	East Gary	Lake
Mather, Robert L.	Lafayette	Tippecanoe
Mathews, James R.	Evansville	Vanderburgh
Mathewson, Russell C.	Muncie	Delaware-Blackford
Matthew, John R.	Westville	La Porte
Matthew, W. Burleigh	Indianapolis	Marion
Matthews, Bernard J.	Indianapolis	Marion
Matthews, William M.	Indianapolis	Marion
Mattox, Dean L.	Howe	LaGrange
Mattox, Don M.	Terre Haute	Vigo
Matzen, Richard N.	Bluffton	Wells
Maurer, J. Frank	Brazil	Clay
Maurer, Robert M.	Brazil	Clay
Mauricio, Amado S. A.	Rising Sun	Dearborn-Ohio
Mauzy, Merritt C.	South Bend	St. Joseph
Maxam, B. T.	Indianapolis	Marion
Maxson, Roy V.	Indianapolis	Marion
Maxwell, Sam B.	Indianapolis	Marion
May, A. J.	New Castle	Henry
May, R. Milton	Laconia	Harrison-Crawford
May, William D.	New Albany	Parke-Vermillion
Mayock, Peter P.	Bluffton	Wells
Mayorga, Alfredo	Gary	Lake
Mead, Frank E.	La Porte	La Porte
Mealey, John, Jr.	Indianapolis	Marion
Medcalf, Norman L. (S)	Lamar	Spencer
Megenhardt, Dennis S.	Indianapolis	Marion
Mehne, Richard G.	Brazil	Clay
Meier, Donald W.	Bluffton	Wells
Meiks, Lyman T.	Indianapolis	Marion
Meiser, Robert D.	Huntington	Huntington
Meissel, Robert L.	Terre Haute	Vigo
Meister, Doris (S)	Anderson	Madison
Melin, John R.	Indianapolis	Marion
Mellinger, Michael O.	LaGrange	LaGrange
Mendelson, Stanley M.	Kokomo	Howard
Mendez, Carlos	Richmond	LaPorte
Mensch, James R.	Fort Wayne	Allen
Mentendiek, Maurice H.	Indianapolis	Marion
Mentzer, William G.	Lafayette	Tippecanoe
Mercer, Samuel R.	Fort Wayne	Allen
Meredith, Elwood J.	Richmond	Wayne-Union
Mericle, Earl W.	Indianapolis	Marion
Mernitz, Roland B., Jr.	Wabash	Wabash
Merritt, A. Donald	Indianapolis	Marion
Merritt, Doris H.	Indianapolis	Marion
Mershon, Jack B.	Indianapolis	Marion
Mertz, Henry O. (S)	Atlanta, Ga.	Marion
Mertz, John H. O.	Indianapolis	Marion
Messer, Frank W.	Kendallville	Noble
Metcalfe, Grant E.	South Bend	St. Joseph
Meyer, Hans	Westville	La Porte
Meyer, Herman A.	Fort Wayne	Allen
Meyer, Theodore O.	Fort Wayne	Allen
Michael, Isaac E.	Indianapolis	Marion
Michaelis, Stephen C.	Fort Wayne	Allen
Michols, Raymond M.	Elkhart	Elkhart
Middleton, Harvey N. (S)	Indianapolis	Marion
Middleton, Ramona J.	Elkhart	Elkhart
Middleton, Thomas O	Bloomington	Owen-Monroe
Miethke, Richard P.	Anderson	Madison
Miklozek, John E.	Terre Haute	Vigo
Milan, Joseph F.	Bloomington	Owen-Monroe
Milan, Shijachki D.	East Chicago	Lake
Millan, Felix	Indianapolis	Marion
Miller, Albert J.	Lafayette	Tippecanoe
Miller, Charles L.	Vincennes	Knox
Miller, Dan T. (S)	Fowler	Benton
Miller, Don E.	Fort Wayne	Allen
Miller, Donald C.	Cedar Lake	Lake
Miller, Edward D.	Birmingham, Ala.	Allen
Miller, Frank H.	Indianapolis	Marion
Miller, Galen R.	Elkhart	Elkhart
Miller, Gerald L.	Markle	Wells
Miller, H. Allison	Marion	Grant
Miller, H. Paul	Fort Wayne	Allen

Name	City	County
Miller, Harold E.	Seymour	Jackson-Jennings
Miller, Harold L.	Richmond	Wayne-Union
Miller, Hugh A., Jr.	Elkhart	Elkhart
Miller, James	Wakarusa	Elkhart
Miller, James C.	Greensburg	Decatur
Miller, Jerry A.	Indianapolis	Marion
Miller, Jerry R.	Indianapolis	Marion
Miller, John D.	Indianapolis	Marion
Miller, Joseph A.	Oaklandon	Hancock
Miller, Kenneth D.	Woodburn	Allen
Miller, L. Hoyt	Indianapolis	Marion
Miller, LaVerne B.	Evansville	Vanderburgh
Miller, Mahlon F.	Fort Wayne	Allen
Miller, Maurice	Michigan City	La Porte
Miller, Milton J.	Evansville	Vanderburgh
Miller, Orval J.	Fort Wayne	Allen
Miller, Ray D.	Martinsville	Morgan
Miller, Richard C.	Shelbyville	Shelby
Miller, Richard H.	Fort Wayne	Allen
Miller, Robert B.	Fort Wayne	Allen
Miller, Robert J.	Paragon	Morgan
Miller, Roland E.	Lafayette	Tippecanoe
Miller, Roscoe E.	Indianapolis	Marion
Miller, Samuel T. (S)	Elkhart	Elkhart
Miller, Virgil C.	Akron	Fulton
Miller, Wayne S.	Huntington	Huntington
Miller, William A.	Hagerstown	Henry
Miller, William J.	Fort Wayne	Allen
Miller, William J.	Lafayette	Tippecanoe
Milleson, Ann L. M.	Terre Haute	Vigo
Millis, Arthur B.	Richmond	Wayne-Union
Millis, Samuel C.	Crawfordsville	Montgomery
Mills, Fred E.	Evansville	Vanderburgh
Mills, John F.	Wabash	Wabash
Milos, Robert J.	Gary	Lake
Minczewski, Richard C.	Gary	Lake
Minich, William G.	Newport	Parke-Vermillion
Minick, Linus J.	Churubusco	Whitley
Mininger, Edward P.	Elkhart	Elkhart
Mino, Robert A.	Evansville	Vanderburgh
Minter, Donald L.	Goshen	Elkhart
Mintz, Alfred M.	Munster	Lake
Mirich, Ernest C.	Crown Point	Lake
Mirro, John A.	Gary	Lake
Misch, William	Cedar Lake	Lake
Mishkin, Irving	Elkhart	Elkhart
Mishler, Joe B.	Pierceton	Whitley
Mitchell, John R.	Terre Haute	Vigo
Mitchell, George H.	Indianapolis	Marion
Mitchell, George L. (S)	Smithville	Owen-Monroe
Mitchell, Georgia B.	Gary	Lake
Mitchell, John B.	Evansville	Vanderburgh
Mladick, Edward A.	Michigan City	La Porte
Moak, Glenn D.	Indianapolis	Marion
Moats, Carl F.	Fort Wayne	Allen
Moats, George E. (S)	Fort Wayne	Allen
Mock, Harry E., Jr.	Franklin	Johnson
Mock, L. Farrell	Bluffton	Wells
Modisett, Jackson W.	Madison	Jefferson-Switzerland
Modisett, Marcella S.	Madison	Jefferson-Switzerland
Modjeski, Joseph R.	Hammond	Lake
Moeller, Victor C.	Fort Wayne	Allen
Moenning, John E.	Oaklandon	Hancock
Moheban, Joseph	Shelbyville	Shelby
Mohler, Floyd W.	Columbus	Bartholomew-Brown
Molengraft, Cornelius J.	Gary	Lake
Moleski, Walter L.	Griffith	Lake
Monar, Michael	Rockport	Spencer
Moneyhun, James E.	Anderson	Madison
Monroe, F. Bruce	Crown Point	Lake
Montes, Herminio Y.	Hammond	Lake
Montgomery, Lall G.	Muncie	Delaware-Blackford
Montgomery, Ralph F.	Muncie	Delaware-Blackford
Montgomery, Samuel B. (S)	Cynthiana	Posey
Montgomery, William F.	Indianapolis	Marion
Moon, Charles E.	Center Point	Clay
Moore, Donald F.	Indianapolis	Marion
Moore, Gene	Terre Haute	Vigo
Moore, Harold T.	Indianapolis	Marion
Moore, Jack C.	Muncie	Delaware-Blackford
Moore, John M.	Kokomo	Howard
Moore, Robert G.	Vincennes	Knox
Moore, Thomas C.	Muncie	Delaware-Blackford
Moore, William C. (S)	Muncie	Delaware-Blackford
Moore, William G.	La Porte	La Porte
Moores, William B.	Indianapolis	Marion
Moosey, Louis	Union Mills	La Porte
Moran, William J.	Indianapolis	Marion
Morchan, Samuel	Indianapolis	Marion
Morec, George J.	New Castle	Henry
Morey, Edwin E.	Fort Wayne	Allen
Morford, Guy	Bloomington	Owen-Monroe
Morgan, Margaret E.	Indianapolis	Marion
Morgan, Milton M.	Fort Wayne	Allen
Moriarty, John R.	Indianapolis	Marion
Morrical, Russell J.	Logansport	Cass
Morris, Edward D., Jr.	Deputy	Jefferson-Switzerland
Morris, Hyman R.	Gary	Lake
Morris, Jean W.	Muncie	Delaware-Blackford
Morris, Robert A.	Anderson	Madison
Morris, Warren V.	Monticello	White
Morris, William H.	Munster	Lake
Morrison, George G., Jr.	Lawrenceburg	Dearborn-Ohio
Morrison, James T.	Greensburg	Decatur
Morrison, Lewis E.	Indianapolis	Marion
Morrison, William R. (S)	Kokomo	Howard
Morrow, Robert J.	Bedford	Lawrence
Mortenson, Leland J.	Fort Wayne	Allen
Morton, David P.	Westville	La Porte
Morton, Joseph L.	Indianapolis	Marion
Morton, Walter P. (S)	Indianapolis	Marion
Moser, Arthur L.	Warsaw	Kosciusko
Moser, Elmer B. (S)	Windfall	Tipton
Moser, Rollin H. (S)	Land O'Lakes, Wis.	Marion
Moses, George E. (S)	Worthington	Greene
Moses, Robert E.	Worthington	Greene
Moss, Bobby L.	Indianapolis	Marion
Moss, Harlan B.	Indianapolis	Marion
Moss, Herschel C.	Indianapolis	Marion
Moss, Mavor J.	Yorktown	Delaware-Blackford
Moswin, Jack A.	Gary	Lake
Mothersill, Mark H. (S)	Indianapolis	Marion
Mott, Cassell A. (S)	South Bend	St. Joseph
Moulton, Lillian G.	Evansville	Vanderburgh
Mount, Mathias S.	Bloomfield	Greene
Mount, William M.	Lafayette	Tippecanoe
Mountain, Francis B.	Connersville	Fayette-Franklin
Mouser, Robert W.	Indianapolis	Marion
Mudd, Joseph P.	Clarksville	Clark
Mudrony-Szoke, Jeno B.	Bluffton	Wells
Muelchi, Adeline F.	Evansville	Vanderburgh
Mullen, James B.	Indianapolis	Marion
Mueller, Edwin C.	La Porte	La Porte
Mueller, Hilbert M.	South Bend	St. Joseph
Mueller, Lawrence W.	Fort Wayne	Allen
Mukhtar, Fuad A.	Lebanon	Boone
Muller, Lullus P.	Indianapolis	Marion
Muller, Paul F.	Indianapolis	Marion
Muller, Victor H.	Indianapolis	Marion

Name	City	County
Mullican, William S.	Evansville	Vanderburgh
Munoz, Jose C.	Marion	Grant
Murdock, Harvey L. (S)	Fort Wayne	Allen
Murphy, Edward U.	Evansville	Vanderburgh
Murphy, Josephine F.	South Bend	St. Joseph
Murphy, Mary M.	Indianapolis	Marion
Murray, Ernest C.	Kokomo	Howard
Murray, John S.	Vincennes	Knox
Murray, William E.	New Castle	Henry
Musselman, Glen G.	Terre Haute	Vigo
Musselman, Lawrence K.	Marion	Grant
Myer, Claude	Sellersburg	Clark
Myers, Charles W. (S)	Indianapolis	Marion
Myers, Philip R.	South Bend	St. Joseph
Myers, Roy V. (S)	West Palm Beach, Fla.	Marion

N

Nagan, Robert F.	Indianapolis	Marion
Nason, Robert A.	Garrett	De Kalb
Nasser, William K.	Indianapolis	Marion
Navin, Hugh K.	Fortville	Hancock
Navarre, Vincent J.	Munster	Lake
Nay, Ernest O. (S)	Terre Haute	Vigo
Nay, Richard M.	Indianapolis	Marion
Neal, Leonard W.	Munster	Lake
Neale, Alfred E.	Anderson	Madison
Neathamer, Thomas A.	Scottsburg	Scott
Nedelkoff, Bogdan	New Albany	Floyd
Neece, Gus W.	Muncie	Delaware-Blackford
Need, David J.	Indianapolis	Marion
Need, Louis T.	Indianapolis	Marion
Need, Richard L.	Indianapolis	Marion
Neher, John L.	South Bend	St. Joseph
Neidballa, Edward G.	Bristol	Elkhart
Neifert, Noel L.	Tell City	Perry
Nelson, Carl A.	West Lebanon	Fountain-Warren
Nelson, F. Dale	South Bend	St. Joseph
Nelson, Harold E.	Muncie	Delaware-Blackford
Nelson, Raymond E.	South Bend	St. Joseph
Nelson, Robert	South Bend	St. Joseph
Nelson, Walfred A.	Gary	Lake
Nenneker, Henry (S)	Evansville	Vanderburgh
Nesbit, Leonard L.	Anderson	Madison
Nester, Henry G.	Indianapolis	Marion
Neudorff, Louis G.	Terre Haute	Vigo
Neukamp, Frank H.	Connersville	Fayette-Franklin
Neumann, Kenneth O.	Lafayette	Tippecanoe
Newby, Eugene	Sheridan	Hamilton
Newcomb, William K.	Royal Center	Cass
Newman, Alvin E. (S)	Ft. Lauderdale, Fla.	Vanderburgh
Newman, Daniel M.	Indianapolis	Marion
Newnam, Philip E.	Muncie	Delaware-Blackford
Newnum, Raymond L.	Evansville	Vanderburgh
Newsome, C. K.	Evansville	Vanderburgh
Newton, Roger E.	Evansville	Vanderburgh
Niccum, Warren L.	Columbia City	Whitley
Nicholas, Dennis J.	Indianapolis	Marion
Nichols, Anne Sackett	Greencastle	Putnam
Nichols, Harold G.	South Bend	St. Joseph
Nichols, Robert J.	Vincennes	Knox
Nichols, William F.	Indianapolis	Marion
Nicholson, Raymond W.	Evansville	Vanderburgh
Nicosia, John B.	East Chicago	Lake
Nie, Louis W.	Indianapolis	Marion
Niedermayer, Alfred J.	Evansville	Vanderburgh
Nigh, Rufus M.	Fairland	Shelby
Nill, John H.	Fort Wayne	Allen
Nixon, Byron	Farmland	Randolph
Noblitt, James S. (S)	Rockville	Parke-Vermillion
Noe, Joseph T.	East Chicago	Lake
Noe, William R.	Bedford	Lawrence
Nohl, John M.	Indianapolis	Marion
Nolan, Gerald R.	Fort Wayne	Allen
Nolan, Robert B.	Zionsville	Marion
Nolin, Richard T.	Indianapolis	Marion
Nolting, Henry F. (S)	Indianapolis	Marion
Nonte, Leo R.	Evansville	Vanderburgh
Noonan, Leo C.	Valparaiso	Porter
Norman, William H.	Indianapolis	Marion
Norris, Marvin G.	Rushville	Rush
Norris, Max S.	Indianapolis	Marion
Norton, Harold J.	Columbus	Bartholomew-Brown
Norton, Horace O.	Washington	Daviess-Martin
Nourse, Myron H.	Indianapolis	Marion
Novak, Clarence G.	Michigan City	LaPorte
Noveroske, Richard J.	Princeton	Gibson
Novy, Charles A.	Garrett	De Kalb
Nugen, Harold	Auburn	De Kalb
Nugent, Edwin J.	Indianapolis	Marion
Nurnberger, John I.	Indianapolis	Marion
Nutter, Wyndham H.	Rushville	Rush

O

Oak, David D., Jr.	Hanna	La Porte
Oak, David D., Sr. (S)	LaCrosse	La Porte
Oatman, Jack G.	Fort Wayne	Allen
Oberlander, Seymour	Gary	Lake
O'Brian, Earl J.	Indianapolis	Marion
O'Brian, John F.	Fort Wayne	Allen
O'Brien, Francis E.	Rensselaer	Jasper
O'Brien, Raymond J.	Michigan City	La Porte
O'Bryan, Richard B.	Columbus	Bartholomew-Brown
Oca, Clemente F.	Jeffersonville	Clark
Ochsner, Harold C.	Indianapolis	Marion
Ochsner, Harold C., Jr.	Indianapolis	Marion
Ockermann, Kenneth R.	Rensselaer	Jasper
O'Connell, Noreen M.	Indianapolis	Marion
Offutt, Andrew C.	Indianapolis	Marion
Ogle, Robert W.	Greenwood	Johnson
Olcott, Charles W.	Aurora	Dearborn-Ohio
Olivo, Marciano T.	Gary	Lake
Olson, Donald T.	South Bend	St. Joseph
Olson, Kenneth L.	South Bend	St. Joseph
Olson, Leslie D.	Gary	Lake
Olvey, Ottis N.	Indianapolis	Marion
Omstead, Milton	Petersburg	Pike
O'Neill, Martin J.	Valparaiso	Porter
Onderak, Edward P.	Valparaiso	Porter
Onorato, Joseph J.	Lafayette	Tippecanoe
Onyett, Harold R.	Greenwood	Marion
Oren, William F.	South Bend	St. Joseph
Ornelas, Joseph P.	Gary	Lake
O'Rourke, Carroll	Fort Wayne	Allen
Orr, W. Robert	Mishawaka	St. Joseph
Osborne, John V.	Muncie	Delaware-Blackford
Oster, Jack H.	Westville	La Porte
Ostheimer, George	Martinsville	Morgan
Oswald, Robert H.	Evansville	Vanderburgh
Oswalt, James T.	Mitchell	Lawrence
Otten, Claude F.	Indianapolis	Marion
Overley, Ross A.	Indianapolis	Marion
Overley, Toner M., Jr.	Indianapolis	Marion
Overpeck, Charles (S)	Greensburg	Decatur
Overpeck, George H. (S)	Alexandria	Madison
Overshiner, Lyman (S)	Columbus	Bartholomew-Brown
Owen, John E.	Indianapolis	Marion
Owen, Thomas F.	Alexandria	Madison
Owens, Tracy C.	Indianapolis	Marion
Owens, Walter L.	Bloomington	Owen-Monroe
Owsley, Guy A.	Hartford City	Delaware-Blackford

Name	City	County
P		
Pace, Jerome V. (S)	Indianapolis	Parke-Vermillion
Paff, William A.	Elkhart	Elkhart
Paine, George E.	Elkhart	Elkhart
Painter, Donald S.	Fort Wayne	Allen
Painter, Lowell W.	Winchester	Randolph
Pairitz, Frank D.	South Bend	St. Joseph
Palmer, Barron M. F.	Hammond	Lake
Palmer, Harley P.	Indianapolis	Marion
Palmer, Robert M.	Indianapolis	Marion
Palmer, Robert W.	Indianapolis	Marion
Palmer, W. Allen	Knox	Starke
Pancost, Vernon K.	Elkhart	Elkhart
Panos, Constantine G.	Bluffton	Wells
Pantzer, John G., Jr.	Indianapolis	Marion
Pappas, Eddie T.	Gary	Lake
Paras, Jose L.	Batesville	Ripley
Pareja, Frank S.	Greenfield	Hancock
Paris, Durward W.	Kokomo	Howard
Paris, John M.	New Albany	Floyd
Park, Byron J.	Richmond	Wayne-Union
Parke, William C.	Warsaw	Kosciusko
Parker, Carey B. (S)	Fort Wayne	Allen
Parker, Carl B.	Wingate	Montgomery
Parker, E. Camille	Logansport	Cass
Parker, Francis W., Jr.	Logansport	Cass
Parker, George F., Jr.	Indianapolis	Marion
Parker, Harry C. (S)	Hobart	Lake
Parker, John C.	Goodland	Newton
Parker, John F.	Indianapolis	Marion
Parker, Portia	Indianapolis	Marion
Parks, George O.	Hartford City	Delaware-Blackford
Parks, Herbert E.	Indianapolis	Marion
Parmenter, Harry B.	Vincennes	Knox
Parr, Robert L.	Indianapolis	Marion
Parratt, Louis W.	Gary	Lake
Parrish, Richard K.	Decatur	Adams
Parrot, Donald J.	Fort Wayne	Allen
Parshall, Dale B.	Elkhart	Elkhart
Parsons, Robert L.	South Bend	St. Joseph
Pascuzzi, Chris A.	South Bend	St. Joseph
Pastor, Julius W.	Evansville	Vanderburgh
Patterson, Jack W.	Fort Wayne	Allen
Patterson, William K.	Anderson	Madison
Pattison, John D.	Marion	Grant
Paul, Eudell G.	Munster	Lake
Paul, Leonard G.	Michigan City	La Porte
Paulissen, George T.	Indianapolis	Marion
Pauly, Leonard R.	Fort Wayne	Allen
Pauszek, Thomas B.	South Bend	St. Joseph
Pavlick, Theodore J.	Evansville	Vanderburgh
Payne, Arthur C. (S)	East Chicago	Lake
Paynter, Morris B.	Southport	Marion
Paz, Luis	Shelbyville	Shelby
Peacock, Norman F.	Crawfordsville	Montgomery
Peacock, Robert C.	Muncie	Delaware-Blackford
Pearce, Roy V.	Terre Haute	Vigo
Pearcy, Marcene	Marion	Grant
Peare, Reeve B.	Huntington	Huntington
Pearson, Huey L.	Fort Wayne	Allen
Pearson, John S.	Indianapolis	Marion
Pearson, Lyman R.	Clearwater, Fla.	Marion
Pearson, William E.	Wabash	Wabash
Peck, Edward A.	Hammond	Lake
Peck, Franklin B., Jr.	Indianapolis	Marion
Peck, Franklin B., Sr.	Indianapolis	Marion
Peck, James F.	Princeton	Gibson
Peiffer, Geraldine M.	Hammond	Lake
Peirce, James D.	Indianapolis	Marion
Pemberton, Jack J.	Evansville	Vanderburgh
Penn, Robert A.	East Gary	Lake
Perdomo, Octavio J.	New Albany	Floyd
Perkins, Powell L.	Kokomo	Howard
Perkins, Thornton D.	Lebanon	Boone
Perrin, Kermit F.	Fort Wayne	Allen
Perry, Frederic G.	Fort Wayne	Allen
Person, Theodore C.	Veedersburg	Fountain-Warren
Peters, Elmer E.	Brookville	Fayette-Franklin
Peterson, Deward D.	Terre Haute	Vigo
Peterson, Joel A. (S)	Monticello	Tippecanoe
Peterson, Ronald L.	Plymouth	Marshall
Petitjean, Harold G.	Haubstadt	Gibson
Petranoff, Theodore V. (S)	Indianapolis	Marion
Petrass, Andrew (S)	South Bend	St. Joseph
Petrich, Peter R.	Attica	Fountain-Warren
Petry, T. Neal	Delphi	Carroll
Pettis, Arthur G.	Gary	Lake
Petway, Allen P.	Madison	Jefferson-Switzerland
Peyton, Frank W.	Lafayette	Tippecanoe
Pfaff, Dudley A. (S)	Indianapolis	Marion
Pfeifer, James M.	Lawrenceburg	Dearborn-Ohio
Pfuetze, Max E.	Logansport	Cass
Phares, Robert W.	Kokomo	Howard
Phelps, Stephen R.	South Bend	St. Joseph
Philbert, Richard N.	Muncie	Delaware-Blackford
Philbrook, Seth S.	La Porte	La Porte
Phillips, David L.	Indianapolis	Marion
Phillips, Donald M.	Gary	Lake
Phillips, John F.	Bluffton	Wells
Phillips, John H.	Michigan City	La Porte
Phipps, Elwood B.	Logansport	Cass
Phipps, Leland K. (S)	Union City	Randolph
Pickerill, James M.	Lafayette	Tippecanoe
Pickett, Merle E.	Fort Wayne	Allen
Pickett, Robert D.	Indianapolis	Marion
Pierce, Emmett C., Jr.	Greenfield	Marion
Pierce, Gene S.	New Albany	Floyd
Pierce, Raymond O.	Indianapolis	Marion
Pierce, William J.	Bruceville	Daviess-Martin
Pierson, Howard	Gary	Lake
Pierson, Pearl H.	Silver Lake	Kosciusko
Pierson, Robert H.	Crawfordsville	Montgomery
Pierson, Thomas A.	New Palestine	Hancock
Pietz, David G.	Bluffton	Wells
Pike, Warren H.	Hobart	Lake
Pilcher, Jack E.	Indianapolis	Marion
Pile, Stafford W., Jr.	Indianapolis	Marion
Pilecki, Peter J.	Michigan City	La Porte
Pilot, Jean	Hammond	Lake
Pippenger, Joseph I.	Muncie	Delaware-Blackford
Pippenger, Wayne G.	Muncie	Delaware-Blackford
Pirkle, Hubert B.	Rockville	Parke-Vermillion
Pitkin, McKendree C. (S)	Martinsville	Morgan
Pittman, John N.	Indianapolis	Marion
Pitts, Neal C.	Bluffton	Wells
Pizzo, Anthony	Bloomington	Owen-Monroe
Plain, George Leroy	South Bend	St. Joseph
Plank, Charles R.	Michigan City	La Porte
Plasterer, Edward D.	Richmond	Wayne-Union
Platis, James M.	Gary	Lake
Pletcher, William D.	Elkhart	Elkhart
Ploetner, Edward J.	Jasper	Dubois
Ploughe, Ralph R.	Elwood	Madison
Poehler, Fred C.	La Fontaine	Wabash
Poland, Maynard D.	APO, San Francisco, Calif.	Marion
Polhemus, Warren C.	Anderson	Madison
Polite, Nicholas L.	Hammond	Lake

Name	City	County
Poncher, John R.	Valparaiso	Porter
Pontius, Edwin E.	Indianapolis	Marion
Poolitsan, George C.	Bloomington	Owen-Monroe
Popp, Milton F.	Fort Wayne	Allen
Popplewell, Arvine G.	Indianapolis	Marion
Poracky, Bernard F.	Gary	Lake
Porro, Francis W.	Evansville	Vanderburgh
Porter, Carl M.	Jasonville	Greene
Porter, Edward A. (S)	Westport	Decatur
Porter, George S.	Richmond	Wayne-Union
Porter, Jack	Lebanon	Boone
Porter, Robert A.	Indianapolis	Marion
Portney, Fred R.	Munster	Lake
Powell, J. Paxton	Marion	Grant
Powell, M. Jack	Fort Wayne	Allen
Powell, Richard C.	Indianapolis	Marion
Powell, Tom D.	Indianapolis	Marion
Prather, Philip E.	Kokomo	Howard
Pratt, Ralph M., Jr.	Madison	Jefferson-Switzerland
Predd, Adolph C.	La Porte	La Porte
Premuda, Franklin F.	Hammond	Lake
Prentiss, Nelson H.	Oteen, N. C.	Allen
Present, Julian D.	Evansville	Vanderburgh
Pribble, Robert H.	Indianapolis	Marion
Price, Ambrose M.	Anderson	Madison
Price, Douglas W.	Nappanee	Elkhart
Price, Francis W.	Indianapolis	Marion
Price, James O.	Indianapolis	Marion
Price, Shirley G.	Evansville	Vanderburgh
Price, Walter S.	Indianapolis	Marion
Priddy, Marvin E.	Fort Wayne	Allen
Priebe, Fred H.	Indianapolis	Montgomery
Proudfit, Charles H.	South Bend	St. Joseph
Province, William D.	Franklin	Johnson
Pruitt, Jacob E.	Gary	Lake
Pryor, Richard C.	Indianapolis	Marion
Pu, Pin H.	Terre Haute	Vigo
Pugh, Willis L.	Evansville	Vanderburgh
Pulskamp, Bertrand H.	Wolcottville	Noble
Purcell, Richard J.	Griffith	Lake
Puterbaugh, Karl E.	Albany	Delaware-Blackford
Pyle, Harold D.	South Bend	St. Joseph

Q

Quakenbush, John	Kokomo	Howard
Quiambao, Hector S.	Ridgeville	Randolph
Quick, William J.	Muncie	Delaware-Blackford
Quigley, Joseph B.	Indianapolis	Marion
Quilty, Thomas J.	Goshen	Elkhart
Quitasol, Zoilo A., Jr.	Michigan City	La Porte

R

Rabb, Aaron	Louisville, Ky.	Marion
Rabb, Frank M.	Indianapolis	Marion
Raber, Robert M.	Indianapolis	Marion
Radcliff, Forest F., Jr.	Evansville	Vanderburgh
Rader, George S.	Indianapolis	Marion
Radigan, Leo R.	Gary	Lake
Radpour, Shokri	Kokomo	Howard
Rafalski, Thomas A.	Indianapolis	Marion
Ragan, William D.	Indianapolis	Marion
Ralston, Marc A.	Lafayette	Tippecanoe
Ramage, Walter F.	Beech Grove	Marion
Ramey, John W. (S)	Kokomo	Howard
Ramker, Daniel T.	Hammond	Lake
Ramsdell, Glen A.	Richmond	Wayne-Union
Ramsey, Frank B.	Indianapolis	Marion
Ramsey, George F.	Lafayette	Tippecanoe
Ramsey, Hugh S.	Bloomington	Owen-Monroe
Ranck, Benjamin A.	Columbus	Bartholomew-Brown
Randall, Thomas A.	Indianapolis	Marion
Raney, Ben B.	Linton	Greene
Rang, A. A. (S)	Washington	Daviess-Martin
Rang, Robert H.	Washington	Daviess-Martin
Rank, William B.	Fort Wayne	Allen
Ransburg, Robert C.	Indianapolis	Marion
Rapp, George F.	Indianapolis	Marion
Rasch, George C., Jr.	Munster	Lake
Rasmussen, Ruth F.	South Bend	St. Joseph
Ratcliff, Frank W.	Lafayette	Tippecanoe
Ratcliffe, Albert W.	Evansville	Vanderburgh
Ratts, L. D.	Bloomington	Owen-Monroe
Rau, Charles A.	Columbus	Bartholomew-Brown
Rauh, Robert A.	Wabash	Wabash
Rausch, Norman W.	Angola	Steuben
Rawlins, Carolyn M.	Munster	Lake
Rawls, George H.	Indianapolis	Marion
Ray, Carl S.	Warren	Huntington
Raymundo, Vivencio F.	Attica	Fountain-Warren
Rea, Ralph L.	Greenfield	Hancock
Rea, Thomas J.	Edwardsburg, Mich.	St. Joseph
Read, John E.	Chesterton	Porter
Receveur, Robert	New Albany	Floyd
Records, Arthur W.	Franklin	Johnson
Records, John M.	Franklin	Johnson
Reed, Donald W.	New Castle	Henry
Reed, Edsel S.	Jeffersonville	Clark
Reed, John J.	Hobart	Lake
Reed, John D.	Fort Wayne	Allen
Reed, Nelle C. (S)	Michigan City	La Porte
Reed, Philip B.	Indianapolis	Marion
Reed, Robert C.	Terre Haute	Vigo
Reed, Robert F.	Mishawaka	St. Joseph
Reed, Robert G., Jr.	Plymouth	Marshall
Reed, Roger R.	Anderson	Madison
Reed, Ronald R.	Whiting	Lake
Reed, Thomas E.	Indianapolis	Marion
Reed, William C. (S)	Nashville	Owen-Monroe
Reeder, Henry H. (S)	Jeffersonville	Clark
Rees, Russel C.	Indianapolis	Marion
Reese, Jay S.	Martinsville	Morgan
Reich, Clarence E.	Evansville	Vanderburgh
Reid, Charles A.	Indianapolis	Marion
Reid, Donald B.	Columbia City	Whitley
Reid, James D.	Marion	Grant
Reid, Robert M.	Columbus	Bartholomew-Brown
Reid, Robert W. (S)	Union City	Randolph
Reilly, James F.	Vincennes	Knox
Reitman, Paul H.	East Chicago	Lake
Reitz, Lawrence A.	Indianapolis	Marion
Remich, Antone C.	Hammond	Lake
Renbarger, Lester L.	Marion	Grant
Rench, Michael J.	Muncie	Delaware-Blackford
Rendel, Donald T.	Munster	Lake
Rendel, Harold E.	Peru	Miami
Reno, Edward C.	Plymouth	Marshall
Repay, Walter A.	Munster	Lake
Reppert, Roland L.	Decatur	Adams
Ress, Gene E.	Tell City	Perry
Reszel, Paul A.	Fort Wayne	Allen
Reuter, John W.	Bedford	Lawrence
Reynolds, James S.	Gary	Lake
Reynolds, Paul	Franklin	Johnson
Reynolds, Ralph E.	Middletown	Madison
Reynolds, Richard J.	Terre Haute	Vigo
Rhamy, Arthur P.	Marion	Grant
Rhamy, Donald E.	Marion	Grant
Rhee, Sang K.	Fort Wayne	Allen
Rheinheimer, Floyd L.	Milford	Elkhart
Rhind, Alexander W.	Hammond	Lake
Rhodes, Alfred K.	Lawrenceburg	Dearborn-Ohio

Name	City	County
Rhodes, Theodore D.	Sarasota, Fla.	Marion
Rhorer, John G.	Marion	Grant
Rhynearson, Hal R.	Fortville	Hancock
Ricchetti, Warren F.	Lafayette	Tippecanoe
Rice, Frederic A., Jr.	Indianapolis	Marion
Rice, Raymond D.	Indianapolis	Marion
Rice, Raymond M.	Indianapolis	Marion
Rice, Ronald B.	Indianapolis	Marion
Rich, Norval S.	Decatur	Adams
Rich, Richard B.	Indianapolis	Marion
Richard, Norman F.	Shelbyville	Shelby
Richards, Alan D.	Fort Wayne	Allen
Richards, Edgar E.	Russellville	Montgomery
Richardson, Joseph D.	Rochester	Fulton
Richardson, Joseph H.	Marion	Grant
Richardson, Thad T.	Indianapolis	Marion
Richart, James V.	Terre Haute	Vigo
Richmond, Harold W.	Columbus	Bartholomew-Brown
Richter, Arthur B.	Indianapolis	Marion
Richter, John C.	La Porte	La Porte
Richter, Samuel	Gary	Lake
Ricketts, Joseph W. (S).	Ormond Beach, Fla.	Marion
Ridgway, Alton H.	Lapel	Madison
Ridolfo, Anthony S.	Indianapolis	Marion
Rieger, I. Taylor	Bloomington	Owen-Monroe
Rietman, H. Jerome	Evansville	Vanderburgh
Rifner, Eugene S.	Van Buren	Grant
Rigaux, Armand J.	South Bend	St. Joseph
Rigg, John F. (S)	Miami Shores, Fla.	Marion
Riggs, Floyd C. (S)	Terre Haute	Vigo
Riggs, Wendell A.	Lafayette	Tippecanoe
Riley, Henry S.	Madison	Jefferson-Switzerland
Riley, Paul D.	Beech Grove	Marion
Rimel, James F.	Plymouth	Marshall
Rinehart, James J.	Kokomo	Howard
Riner, Jack K.	Indianapolis	Marion
Ringer, William A.	Williamsport	Fountain-Warren
Rinne, John I. (S)	Lapel	Madison
Riordan, John F.	Gary	Lake
Ripley, John W.	Seymour	Jackson-Jennings
Rissing, Walter J.	Fort Wayne	Allen
Ritchie, Richard F.	Westville	La Porte
Ritchie, William D.	Evansville	Vanderburgh
Ritchey, James O.	Indianapolis	Marion
Ritteman, George W.	Franklin	Johnson
Ritter, Wayne L.	Indianapolis	Marion
Rittmeyer, Jack L.	Muncie	Delaware-Blackford
Ritz, Albert S.	Evansville	Vanderburgh
Rivers, Glynn A.	Muncie	Delaware-Blackford
Rivers, Thomas A.	Muncie	Delaware-Blackford
Rizk, Mahfouz H.	Gary	Lake
Robb, John A.	Indianapolis	Marion
Roberts, Billy J.	South Bend	St. Joseph
Robertson, Addis N. (S)	New Albany	Floyd
Robertson, James S.	Plymouth	Marshall
Robertson, Ray B.	Indianapolis	Marion
Robertson, William C.	Chesterton	Porter
Robertson, William S.	Spiceland	Henry
Robinson, Earle U., Jr.	Indianapolis	Marion
Robinson, Frank C. (S)	Newport Beach, Calif.	Marion
Robinson, Nan	New Albany	Floyd
Robinson, Robert D.	Bloomington	Owen-Monroe
Robinson, Walter K.	Gary	Lake
Roby, Alma L.	Jeffersonville	Clark
Rochlin, Isidore	Indianapolis	Marion
Rockey, Noah A. (S)	Fort Wayne	Allen
Roesch, Ryland P.	Indianapolis	Marion
Roeske, Nancy A.	Indianapolis	Marion
Rogers, Donald L.	Indianapolis	Marion
Rogers, Evered E.	Auburn	De Kalb
Rogers, Otto F., Jr.	Bloomington	Owen-Monroe
Rogers, R. Shirrell	Terre Haute	Vigo
Rogers, Thomas P.	Jeffersonville	Marion
Roggenkamp, Milton W.	W. Lafayette	Tippecanoe
Rohn, Robert J.	Indianapolis	Marion
Rohrer, Bryce B.	Walkerton	La Porte
Rohrer, James R.	Elnora	Daviess-Martin
Roller, Charles W. (S)	Indianapolis	Marion
Roller, Mac C.	Franklin	Johnson
Rollins, Thomas K.	Bloomington	Owen-Monroe
Romberger, Floyd T., Jr.	Indianapolis	Marion
Romero, Plinio	East Chicago	Lake
Rommel, Clarence H.	W. Lafayette	Tippecanoe
Roof, Roger S.	Greencastle	Putnam
Roose, Lisle W.	Nappanee	Elkhart
Ropp, Harold E.	New Harmony	Posey
Rosato, Edward J.	Evansville	Vanderburgh
Rosenak, Bernard D.	Indianapolis	Marion
Rosenbaum, Irving, Jr.	Indianapolis	Marion
Rosenbaum, Lloyd E.	Anderson	Madison
Rosenberg, Gabriel J.	Indianapolis	Marion
Rosenblatt, Bernard B.	Evansville	Vanderburgh
Rosenbloom, Philip J.	Gary	Lake
Rosenheimer, George M.	South Bend	St. Joseph
Rosenthal, Carl	Hammond	Lake
Rosenwasser, Jacob	Mishawaka	St. Joseph
Roser, Arthur J.	Fort Wayne	Allen
Rosero, M. George	Culver	Marshall
Rosevear, Henry J.	Munster	Lake
Ross, Alexander T.	Indianapolis	Marion
Ross, Ben R.	Bloomington	Owen-Monroe
Ross, David E., Jr.	Gary	Lake
Ross, Glenn E.	Washington	Daviess-Martin
Ross, Guy E.	Anderson	Madison
Ross, James B.	Bloomington	Owen-Monroe
Rossiter, Dudley L. (S)	Fort Wayne	Allen
Roth, Bertram S.	Indianapolis	Marion
Roth, James R.	Columbia City	Whitley
Roth, Leo	Gary	Lake
Roth, Melvin I.	Gary	Lake
Rothberg, Maurice	Fort Wayne	Allen
Rothrock, Philip W.	Lafayette	Tippecanoe
Rotman, Harry G.	Jasonville	Greene
Rotman, Sam I.	Jasonville	Greene
Rouen, Robert L.	Elkhart	Elkhart
Rourke, Robert F.	Terre Haute	Vigo
Rousseau, John W.	Fort Wayne	Allen
Row, D. Hamilton	Indianapolis	Marion
Row, George S.	Osgood	Ripley
Rowe, Howard H.	Rochester	Fulton
Royster, George M. (S)	Evansville	Vanderburgh
Royster, Robert A.	Evansville	Vanderburgh
Rubens, Eli	South Bend	St. Joseph
Rubin, Milton M.	Terre Haute	Vigo
Rubin, Simon S.	Gary	Lake
Rubright, Robert L.	Munster	Lake
Ruddell, Karl R. (S)	Indianapolis	Marion
Ruddell, Keith R.	Indianapolis	Marion
Rudesill, Cecil L. (S)	Indianapolis	Marion
Rudesill, Robert L.	Indianapolis	Marion
Rudicel, Max	Kokomo	Howard
Rudolph, Carl J.	South Bend	St. Joseph
Rudolph, Kenneth J.	Evansville	Vanderburgh
Rudolph, Rosser A.	Geneva	Jay
Rudolph, Stephen J., Jr.	APO 235, San Francisco	Marion
Rudser, Donald H.	Whiting	Lake
Rudy, Donald B.	Rhodesia, S. Africa	Wells
Ruff, Jerard G.	Bloomington	Owen-Monroe
Runge, Paul W.	Richmond	Wayne-Union
Ruoff, William F.	New Albany	Floyd

Name	City	County
Rupe, Lloyd O.	Elkhart	Elkhart
Rupel, Dennis F.	Elkhart	Elkhart
Rupper, Warren R.	Evansville	Vanderburgh
Rusche, Henry J.	Evansville	Vanderburgh
Rusche, Thomas J.	Indianapolis	Marion
Ruschli, Edward B. (S)	Lafayette	Tippecanoe
Rusher, Merrill W.	Bluffton	Wells
Rushmore, Charles H.	Indianapolis	Marion
Rusk, Hubert M.	Wallace	Fountain-Warren
Russell, Henry T.	W. Lafayette	Tippecanoe
Russell, John R.	Indianapolis	Marion
Russell, Richard H.	Evansville	Vanderburgh
Russo, Andrew E.	Gary	Lake
Rust, Byron K.	Big Pine Key, Fla.	Marion
Rust, Roland B.	Indianapolis	Marion
Ruth, Martin L.	Indianapolis	Marion
Rutherford, Charles E.	Lafayette	Tippecanoe
Ryan, C. David	Columbus	Bartholomew-Brown
Ryan, Glen V.	Indianapolis	Marion
Ryan, Hubert J.	Gary	Lake
Ryan, William J.	Columbus	Bartholomew-Brown

S

Saavedra, Bernardo	Gary	Lake
Sacks, Leonard Z.	Valparaiso	Porter
Sage, Charles V., Jr.	Richmond	Wayne-Union
Sage, Russell A., Jr.	Indianapolis	Marion
Sage, Russell A.	Indianapolis	Marion
Sahlmann, Hans (S)	Fort Wayne	Allen
Saint, William K.	New Castle	Henry
Sala, Joseph J.	Gary	Lake
Sala, Walter R.	Gary	Lake
Salb, John P.	Jasper	Dubois
Salb, Leo A. (S)	Jasper	Dubois
Salb, Max C.	Kuttawa, Ky.	Marion
Salon, Harry W.	Fort Wayne	Allen
Salon, Joel W.	Fort Wayne	Allen
Salon, Nathan L.	Fort Wayne	Allen
Salsburg, Herbert E.	Westville	La Porte
Sanchez, Jose D.	La Porte	La Porte
Sanders, Bertram W.	Connersville	Fayette-Franklin
Sanders, Fred	Indianapolis	Marion
Sanders, Harry M.	Indianapolis	Marion
Sanders, Jesse A. (S)	Auburn	De Kalb
Sanderson, Robert B.	South Bend	St. Joseph
Sandlin, Donald L.	Columbus	Bartholomew-Brown
Sandock, Louis F.	South Bend	St. Joseph
Sandoz, Harry H.	South Bend	St. Joseph
Santare, Vincent J.	Munster	Lake
Santiago, Iluminada	Highland	Lake
Saperstein, Morris	Indianapolis	Marion
Sappenfield, Ralph S.	Indianapolis	Marion
Sarver, Francis E.	Fort Wayne	Allen
Saucelo, Bart M.	South Bend	St. Joseph
Savage, Arthur R.	Fort Wayne	Allen
Sayers, Frank E. (S)	Terre Haute	Vigo
Scales, Alfred B.	Huntingburg	Dubois
Scales, Allen D.	Huntingburg	Dubois
Scamahorn, Malcolm O.	Pittsboro	Hendricks
Scea, Wallace A.	Elwood	Madison
Schaab, Eric	Fort Wayne	Allen
Schaaf, Alvin D.	Jamestown	Boone
Schaefer, Joseph C.	Bluffton	Wells
Schafer, William C.	Washington	Daviess-Martin
Schaffer, Edward V.	Indianapolis	Marion
Schaffer, James J.	Bloomington	Owen-Monroe
Schantz, Richard	Remington	Jasper
Schaphorst, Richard A.	Mishawaka	St. Joseph
Scharbrough, Wm. D.	Ewing	Jackson-Jennings
Schauwecker, Cleon M.	Greencastle	Putnam
Schechter, John S.	Indianapolis	Marion
Scheer, Alexander L.	Elkhart	Elkhart
Scheeres, Jacob W.	Lafayette	Tippecanoe
Scheeringa, Ronald H.	Galveston, Texas	Marion
Scheier, Emil W. (S)	Indianapolis	Marion
Scheimann, Lois	Valparaiso	Porter
Schell, H. Richard	Bloomington	Owen-Monroe
Schenck, Ralph E.	Portland	Jay
Scherb, Burton E.	Terre Haute	Vigo
Schermer, Kenneth L.	Portsmouth, Va.	Marion
Scherschel, John P.	Bedford	Lawrence
Scheurich, Virgil	Oxford	Benton
Schiffer, Eva M.	Indianapolis	Marion
Schiller, Herbert A.	South Bend	St. Joseph
Schilling, Richard J.	Bloomington	Owen-Monroe
Schimmelpfennig, Robert W.	Evansville	Vanderburgh
Schirmer, Robert H.	Evansville	Vanderburgh
Schlademan, Karl R.	Fort Wayne	Allen
Schlaegel, Theo. F., Jr.	Indianapolis	Marion
Schlegel, Donald M.	Indianapolis	Marion
Schleinkofer, Robert M.	Fort Wayne	Allen
Schlesinger, Daniel J.	Munster	Lake
Schloss, Robert P.	Fort Wayne	Allen
Schlossberg, Victor E., Jr.	Mishawaka	St. Joseph
Schlosser, Herbert C. (S)	Elkhart	Elkhart
Schmalhausen, Ansel W.	Indianapolis	Marion
Schmidt, Eugene E.	Fort Wayne	Allen
Schmidt, Loren F.	Indianapolis	Marion
Schmidt, Robert B.	Muncie	Delaware-Blackford
Schmiedicke, Paul H.	W. Lafayette	Tippecanoe
Schmitt, Richard K.	Columbus	Bartholomew-Brown
Schmitt, Robert J.	Munster	Lake
Schmitt, Robert W.	Richmond	Wayne-Union
Schmoll, Robert J.	Fort Wayne	Allen
Schmoyer, Maurice R.	Indianapolis	Marion
Schneider, Carl J.	Indianapolis	Marion
Schneider, Charles P.	Evansville	Vanderburgh
Schneider, Kenneth D.	Columbus	Bartholomew-Brown
Schneider, Louis A.	Fort Wayne	Allen
Schneider, Marvin C.	Rushville	Rush
Schneider, Paul A.	Indianapolis	Marion
Schnute, Richard B.	Indianapolis	Marion
Schoen, Frederic L.	Fort Wayne	Allen
Schoenhals, Charles E.	Fort Wayne	Allen
Schoolfield, William E.	Orleans	Orange
Schoonveld, Arthur	Brook	Newton
Schott, Edward J. (S)	Terre Haute	Vigo
Schreiner, John E.	Bremen	Marshall
Schrepferman, Wayne	Hamilton	Steuben
Schriefer, Victor V.	Evansville	Vanderburgh
Schroeder, Henry R., Jr.	Washington	Daviess-Martin
Schroeder, James E.	Indianapolis	Marion
Schubert, Jerome C.	Fort Wayne	Allen
Schubert, Philip C.	Roanoke	Allen
Schuchman, Gabriel	Indianapolis	Marion
Schulhof, Maurice G.	Muncie	Delaware-Blackford
Schultheis, Richard L.	Bloomington	Owen-Monroe
Schulz, Kurt J.	Gary	Lake
Schumacher, Richard R.	Indianapolis	Marion
Schumaker, Robert A.	Terre Haute	Vigo
Schuman, Edith B.	Bloomington	Owen-Monroe
Schuster, Dwight W.	Indianapolis	Marion
Schwartz, Frederick C.	Kokomo	Howard
Schwartz, Jack	Munster	Lake
Schwartz, Mary M.	Hammond	Lake

Name	City	County
Schwarz, Anton	Zionsville	Marion
Scofield, John B.	Indianapolis	Marion
Scott, Frank M.	South Bend	St. Joseph
Scott, George E.	Indianapolis	Marion
Scott, H. Vaughn	Fort Wayne	Allen
Scott, Irvin H.	Sullivan	Sullivan
Scott, I. Winfield	Indianapolis	Marion
Scott, John R.	Indianapolis	Marion
Scott, John S.	La Porte	La Porte
Scott, Robert O.	Charlottesville	Hancock
Scott, Robert P.	Indianapolis	Marion
Scott, Samuel L.	Indianapolis	Marion
Scott, V. Brown	Shelbyville	Shelby
Scudder, Arthur N.	Brownsburg	Hendricks
Scudder, James P.	Fort Wayne	Allen
Scully, John T.	Gary	Lake
Scully, William E.	Terre Haute	Vigo
Seagle, William C.	Bloomington	Owen-Monroe
Seal, Perry F.	Brookville	Fayette-Franklin
Seaman, Charles F.	Indianapolis	Marion
Searight, Howard R.	Muncie	Delaware-Blackford
Searight, John L.	Indianapolis	Marion
Sears, Murray M. (S)	Elkhart	Elkhart
Seat, Marshall H.	Washington	Daviess-Martin
Sedam, Herbert L.	Indianapolis	Marion
Seese, Robert M.	Delphi	Carroll
Segar, William E.	Indianapolis	Marion
Seibel, Robert M.	Nashville	Bartholomew-Brown
Seipel, Stanley	Lanesville	Harrison-Crawford
Sekulich, Milo	Kokomo	Howard
Sellers, Francis M.	Mishawaka	St. Joseph
Sellmer, George W.	Indianapolis	Marion
Senese, Thomas J.	Gary	Lake
Sennett, Cecil M. (S)	Westville	La Porte
Sennett, William K.	Macy	Miami
Senseny, Eugene F.	Fort Wayne	Allen
Serna, Carlos A.	Munster	Lake
Sexson, Hiram T.	Indianapolis	Marion
Seybert, Thomas C.	Indianapolis	Marion
Seyler, Anna G.	La Verne, Calif.	Lake
Shafer, Marion R.	Indianapolis	Marion
Shafer, Richard H.	Alexandria	Madison
Shaffer, Kenneth L.	Vincennes	Knox
Shaffer, William R.	Greensburg	Decatur
Shallenberger, Henry R.	Modoc	Randolph
Shanafelt, Donald K.	Indianapolis	Marion
Shanklin, Jack L.	Vincennes	Knox
Shanklin, Vernon A. (S)	Terre Haute	Vigo
Shanks, Ray W.	Noblesville	Hamilton
Shannon, Wesley E.	Crawfordsville	Montgomery
Shapiro, Burton J.	Indianapolis	Marion
Shapiro, Joseph	Hammond	Lake
Shapiro, Seymour W.	Gary	Lake
Sharp, Merle C.	South Bend	St. Joseph
Sharp, William L.	Anderson	Madison
Shattuck, John C.	Brazil	Clay
Shaw, Glenn R.	Bluffton	Wells
Shaw, Houston W.	Jeffersonville	Clark
Shaw, James E.	Fort Wayne	Allen
Sheehan, E. Gregg	Evansville	Vanderburgh
Sheehan, Francis G.	Indianapolis	Marion
Sheek, Kenneth I.	Greenwood	Johnson
Sheets, Charles E.	Manilla	Rush
Sheldon, Suel A.	Anderson	Madison
Sheller, Tom G.	Logansport	Cass
Shelley, Edward S.	South Bend	St. Joseph
Shelley, Richard J.	Indianapolis	Marion
Shelton, Clyde F.	New Albany	Floyd
Shepard, Fred F.	College Corner, Ohio	Wayne-Union
Sherer, Kenneth E.	Richmond	Wayne-Union
Sherster, Harry	Indianapolis	Marion
Sherwood, Clarence E.	Madison, So. Dakota	Allen
Sherwood, J. Vincent	Largo, Fla.	Allen
Shevick, Alexander	Gary	Lake
Shields, Duncan M.	Chesterton	Porter
Shields, Jack E.	Brownstown	Jackson-Jennings
Shields, Tom S.	Richmond	Wayne-Union
Shinabery, Lawerence	Fort Wayne	Allen
Shipley, Edward	Indianapolis	Marion
Shively, John L.	Lafayette	Tippecanoe
Shively, Wyant J.	Evansville	Vanderburgh
Shoemaker, Richard L.	Gas City	Grant
Sholty, William M.	Lafayette	Tippecanoe
Shonkwiler, Jack D.	Greencastle	Putnam
Short, John A.	Richmond	Wayne-Union
Short, John T. (S)	Fort Wayne	Allen
Showalter, John P.	Angola	De Kalb
Showalter, John R.	Terre Haute	Vigo
Shriber, William H.	South Bend	St. Joseph
Shriner, Richard L.	South Bend	St. Joseph
Shrock, Ethan E.	Amboy	Grant
Shroyer, Herbert L.	Dunkirk	Jay
Shuck, William A.	Madison	Jefferson-Switzerland
Shugart, Robert R.	Fort Wayne	Allen
Shullenberger, Wendell A.	Indianapolis	Marion
Shulruff, Harry I.	East Chicago	Lake
Shultz, Clifford	Butler	De Kalb
Shumacker, Harris B., Jr.	Indianapolis	Marion
Sibbitt, Joseph W.	Bloomington	Owen-Monroe
Sicks, Okla W. (S)	Indianapolis	Marion
Sidel, Alan W.	Columbus, Miss.	Marion
Sidell, James P.	New Haven	Allen
Siderys, Harry	Indianapolis	Marion
Siebe, Jack C.	Indianapolis	Marion
Siebenmorgen, Paul	Terre Haute	Vigo
Siegel, Lyle P.	Evansville	Vanderburgh
Siekierski, Joseph M.	Griffith	Lake
Siersdorfer, Theodore N. (S)	Indianapolis	Marion
Sigmond, Harvey W.	Indianapolis	Marion
Sigmund, William B.	Columbus	Bartholomew-Brown
Silbert, David B.	Shelbyville	Shelby
Siler, George B.	Whiting	Lake
Silver, Richard A.	Indianapolis	Marion
Silverman, Norman M.	Terre Haute	Vigo
Silvers, Michael	N. Manchester	Wabash
Silvian, Harry A.	Whiting	Lake
Simmons, Frederick H.	Marion	Grant
Simmons, James E.	Indianapolis	Marion
Simmons, Lloyd H. (S)	Goshen	Elkhart
Simms, J. Leon	Indianapolis	Marion
Simpson, William D.	Wilmington, Del.	Marion
Sims, J. Lawrence	Indianapolis	Marion
Sims, Larry W.	Evansville	Vanderburgh
Singco, Bienvenido	Greenfield	Hancock
Singer, Elmer C. (S)	Fort Wayne	Allen
Sinn, Charles M.	Evansville	Vanderburgh
Sirlin, Edward M.	Fort Wayne	Allen
Sirugo, Aldo C.	La Porte	La Porte
Sison, Vicente G.	Terre Haute	Vigo
Sisson, Norvel D.	South Bend	St. Joseph
Sixbey, Maurice D.	Denver	Miami
Skeen, Earl D. (S)	South Bend	Lake
Skillern, Scott D.	South Bend	St. Joseph
Skomp, Claud E.	Marion	Grant
Skrentny, Thomas T.	Spencer	Owen-Monroe
Slama, George F.	Gary	Lake
Slama, John T.	Gary	Lake
Slaughter, Howard C.	Evansville	Vanderburgh
Slaughter, John C., Jr.	Evansville	Vanderburgh
Slaughter, Owen L.	Evansville	Vanderburgh

Name	City	County
Slichenmyer, Jack E.	Indianapolis	Marion
Slick, Crystal R.	Winchester	Randolph
Sloan, Herbert P.	Jeffersonville	Floyd
Sloan, W. Keith	Madison	Jefferson-Switzerland
Slominski, Harry H. (S)	South Bend	St. Joseph
Slomka, Myron B.	New York, N. Y.	Marion
Slough, O. Thomas	Indianapolis	Noble
Sluss, David H.	Indianapolis	Marion
Small, Iver F.	Indianapolis	Marion
Smith, A. Wilson	Greencastle	Putnam
Smith, Barton T.	Marion	Grant
Smith, Byron J.	Kingman	Fountain-Warren
Smith, C. Curtis	Fort Wayne	Allen
Smith, Charles F.	Kokomo	Howard
Smith, David L. (S)	Indianapolis	Marion
Smith, E. Rogers (S)	Indianapolis	Marion
Smith, Francis C.	Indianapolis	Marion
Smith, Fred, Jr.	Tell City	Perry
Smith, Gloster J.	Kokomo	Howard
Smith, Herbert N.	Brookville	Fayette-Franklin
Smith, Herschel S.	Bloomington	Owen-Monroe
Smith, Jerald E.	Munster	Lake
Smith, John A.	LaPorte	LaPorte
Smith, John H.	Greenfield	Hancock
Smith, Lloyd H.	North Manchester	Wabash
Smith, Lowell C.	Lafayette	Tippecanoe
Smith, Mark E.	New Castle	Henry
Smith, Philip L.	Fort Wayne	Allen
Smith, Ralph O.	Vincennes	Knox
Smith, Robert D.	Lowell	Lake
Smith, Roger C.	Fort Wayne	Allen
Smith, Roy Lee (S)	Indianapolis	Marion
Smith, Roy M., Jr.	Evansville	Vanderburgh
Smith, Stephen D.	Knightstown	Rush
Smith, Stephen M.	Pensacola, Fla.	Marion
Smith, Theodore J.	Whiting	Lake
Smitley, Roger P.	Munster	Lake
Smucker, Ernest E.	Goshen	Elkhart
Smyrniotis, Frank	Wabash	Wabash
Snapp, Richard A.	Columbus	Bartholomew-Brown
Sneary, Max E.	Avilla	Noble
Snider, Byron	Escondido, Calif.	Marion
Snider, Roland	Warsaw	Kosciusko
Snively, William D., Jr.	Evansville	Vanderburgh
Snodgrass, Robert E.	Indianapolis	Marion
Snowhite, Arthur B.	Marion	Grant
Snyder, Jerome A.	Munster	Lake
Snyder, Morris C.	Richmond	Wayne-Union
Snyder, Parker W.	Peru	Miami
Snyderman, Sanford C.	Fort Wayne	Allen
Sobat, William S.	Indianapolis	Marion
Sobol, Z. W.	South Bend	St. Joseph
Sokol, Allen B.	Whiting	Lake
Solis, Roger V.	Hammond	Lake
Solomon, Reuben A. (S)	Indianapolis	Marion
Somers, Gerald H.	Fort Wayne	Allen
Somerville, J. W.	Clinton	Parke-Vermillion
Sonne, Irvin H., Jr.	New Albany	Floyd
Soper, Hunter A.	Indianapolis	Marion
Sorg, David A.	Bluffton	Wells
Sorrells, George W.	Bedford	Lawrence
Souder, Bonnell M. (S)	Auburn	De Kalb
Souter, Martha C.	Indianapolis	Marion
South, Herman H.	Richmond	Wayne-Union
Sovine, Joe W.	Indianapolis	Marion
Spahr, Donald E.	Portland	Jay
Spahr, John F., Jr.	Indianapolis	Marion
Spalding, David L.	Mishawaka	St. Joseph
Spalding, Joseph J.	Indianapolis	Marion
Spalding, Wendell L.	Mishawaka	St. Joseph
Spangler, Jesse S.	Kokomo	Howard
Sparks, Alan L.	Indianapolis	Marion
Sparks, Paul W.	Winchester	Randolph
Spears, John K.	Paoli	Orange
Spears, John M.	Indianapolis	Marion
Speas, Robert C.	Terre Haute	Vigo
Speck, Carlson R.	Muncie	Delaware-Blackford
Speckman, Glenn H.	Indianapolis	Marion
Speer, Thomas A.	Gary	Lake
Spellman, Frank W.	Gary	Lake
Spellmeyer, John C.	Richmond	Wayne-Union
Spencer, Beaufort A.	Bloomington	Owen-Monroe
Spencer, Frederic	Vincennes	Knox
Spencer, C. Herbert	Fort Wayne	Allen
Spenner, Raymond W.	South Bend	St. Joseph
Spindler, Robert D.	Shelbyville	Shelby
Spivack, Mary	Gary	Lake
Spolyar, Louis W.	Indianapolis	Marion
Spray, Page E.	Elkhart	Elkhart
Sprecher, Herman C.	Evansville	Vanderburgh
Sprecher, James J. J.	La Porte	La Porte
Springstun, George H. (S)	Oaktown	Knox
Springstun, Walter R.	Evansville	Vanderburgh
Spurlock, Fae H.	W. Lafayette	Tippecanoe
Sputh, Carl B., Jr.	Indianapolis	Marion
Sroka, Alexander G.	Hammond	Lake
Sroka, Stanley J.	Highland	Lake
Stadler, Harold E.	Indianapolis	Marion
Stafford, William C.	Plainfield	Hendricks
Stahl, Edward T.	Lafayette	Tippecanoe
Stallings, Hugh A.	Evansville	Vanderburgh
Stallman, Carl F.	Kendallville	Noble
Stalter, Gaylord W.	North Webster	Whitley
Stamper, Joseph H.	Anderson	Madison
Stander, Richard W.	Indianapolis	Marion
Stangle, William J.	Bloomington	Owen-Monroe
Stanley, John R.	Muncie	Delaware-Blackford
Stanley, Robert G.	Fort Wayne	Allen
Stansbury, William E.	Indianapolis	Marion
Stark, William A.	Michigan City	La Porte
Starks, William O.	Anderson	Madison
Stauffer, George E.	Mooreland	Henry
Stauffer, Richard C.	Fort Wayne	Allen
Staunton, Henry A.	South Bend	St. Joseph
Stayton, Chester A., Jr.	Indianapolis	Marion
Steckbeck, Robert L.	Bluffton	Wells
Stecy, Peter	Whiting	Lake
Steele, Dick J.	Greencastle	Putnam
Steele, Everett B.	Crown Point	Lake
Steele, Hugh H.	Lafayette	Tippecanoe
Steele, Paul W.	Evansville	Vanderburgh
Steen, Lowell H.	Whiting	Lake
Steffen, Julius T.	Wabash	Wabash
Steffy, Ralph M.	Portland	Jay
Steigmeyer, David J.	Fort Wayne	Allen
Stein, Richard H.	Vincennes	Knox
Steinem, Joseph L.	Connersville	Fayette-Franklin
Steinmetz, Edward F.	Indianapolis	Marion
Stephens, Donald E.	Indianapolis	Marion
Stephens, Kuhrman H.	Indianapolis	Marion
Stephens, Lowell R.	Covington	Fountain-Warren
Stepleton, John D.	Richmond	Wayne-Union
Stern, Mona K.	Gary	Lake
Stern, Samuel L.	Hammond	Lake
Sterne, John H.	Evansville	Vanderburgh
Stetson, John B.	Indianapolis	Marion
Steury, Ernest M.	Kenya, Africa	Marion
Steussy, Calvin N.	New Castle	Henry
Stevens, Adam C.	Kendallville	Wells
Stevens, Edwin W.	Munster	Lake
Stevens, Sydney L.	Indianapolis	Marion
Stevenson, Jerry L.	Anderson	Madison

Name	City	County
Steward, Paul W.	Cedar Lake	Lake
Stewart, J. Frank W.	Vincennes	Knox
Stewart, L. Ray	Evansville	Vanderburgh
Stewart, Walter E. (S)	Terre Haute	Vigo
Stier, Paul L.	Fort Wayne	Allen
Stilwell, William R.	Richmond	Wayne-Union
Stine, Marshall E.	Bremen	Marshall
Stinson, Dean K.	Rochester	Fulton
Stinson, William M.	Anderson	Madison
Stiver, Daniel D.	South Bend	St. Joseph
Stoelting, J. Lewis	Terre Haute	Vigo
Stoelting, Vergil K.	Indianapolis	Marion
Stogdill, William J.	South Bend	St. Joseph
Stogsdill, Willis W.	Franklin	Johnson
Stoller, Leon J.	Dayton, Ohio	Marion
Stoltz, Robert M.	Valparaiso	Porter
Stolz, Thomas J.	W. Lafayette	Benton
Stone, Alvin T.	Indianapolis	Marion
Stone, David F.	Indianapolis	Marion
Stone, Grant C.	Rochester	Fulton
Stone, Robert C.	Ligonier	Noble
Stoner, Harold E.	Bloomington	Owen-Monroe
Stoops, Jean T.	Wabash	Wabash
Storey, D. Edmund	Indianapolis	Marion
Storey, Joseph L.	Indianapolis	Marion
Stork, Harvey K.	Huntingburg	Dubois
Stork, Urban F. D.	Evansville	Vanderburgh
Storms, Roy B. (S)	Indianapolis	Marion
Stouder, Albert E.	Kempton	Tipton
Stouder, Charles E.	Ellettsville	Owen-Monroe
Stout, Francis E.	Muncie	Delaware-Blackford
Stout, Harry T.	Frankfort	Clinton
Stover, Wendell C.	Boonville	Warrick
Stoycoff, Christ M. (S)	Gary	Lake
Strang, William C.	Indianapolis	Marion
Stratigos, Joseph S.	South Bend	St. Joseph
Strayer, Joseph W.	Lafayette	Tippecanoe
Streck, Francis A.	Lawrenceburg	Dearborn-Ohio
Strecker, William L.	Terre Haute	Vigo
Streepey, Jefferson I.	New Albany	Floyd
Streeter, Ralph T.	Indianapolis	Marion
Stribling, James L.	Columbus	Bartholomew-Brown
Stricker, Paul J.	New Castle	Henry
Strehler, Don A.	Bluffton	Wells
Strickland, James W.	Ellsworth AFB, S. Dakota	Marion
Strickland, Neil R.	Indianapolis	Marion
Stringer, Drennon D.	Mishawaka	St. Joseph
Strom, Jack	East Chicago	Lake
Strueh, Paul E.	Evansville	Vanderburgh
Stubbins, William M.	Elkhart	Elkhart
Stucky, Elsworth K.	Indianapolis	Marion
Stucky, Jerry L.	Fort Wayne	Allen
Studebaker, Lloyd R.	LaGrange	LaGrange
Stultz, Quentin F.	Ligonier	Noble
Stump, Loyd K.	Indianapolis	Marion
Stump, Richard L.	Muncie	Delaware-Blackford
Stump, Thomas A.	Indianapolis	Marion
Stumpf, Edwin E.	New Haven	Allen
Stuntz, Edgar C.	Lafayette	Tippecanoe
Sturdevant, Frank M.	Portage	Porter
Sturgis, Donald G.	Sellersburg	Clark
Suelzer, John G.	Indianapolis	Marion
Suess, Robert E.	Indianapolis	Marion
Sugarman, Benjamin E.	French Lick	Orange
Sulit, Severino T.	Hartford City	Delaware-Blackford
Sullivan, James J.	Indianapolis	Marion
Sullivan, John M.	Terre Haute	Vigo
Sullivan, Robert E.	Fort Wayne	Allen
Summerlin, Jack D.	Indianapolis	Marion
Sun, Chen T.	Hebron	Porter
Surratt, Mary Norris	Indianapolis	Marion
Sutton, William E.	Indianapolis	Marion
Suzuki, Tsutomu T.	Covington	Fountain-Warren
Swan, John R.	Indianapolis	Marion
Swan, Robert E.	Evansville	Vanderburgh
Swank, Lucretia R.	Elkhart	Elkhart
Sweeney, Robert M.	South Bend	St. Joseph
Sweet, Howard E.	Richmond	Wayne-Union
Swihart, Danny D.	Elkhart	Elkhart
Swihart, Homer R.	Elkhart	Elkhart
Swihart, John J.	Argos	Marshall
Symmes, Alfred T.	Indianapolis	Marion
Symon, William E.	Bluffton	Wells
Szumilas, Peter P.	Anderson	Madison
Szynal, John S.	Indianapolis	Marion

T

Tabaka, Francis B.	La Porte	La Porte
Tager, Stephen N.	Evansville	Vanderburgh
Takahashi, Masato	Los Angeles, Calif.	Marion
Talbert, Pierre C.	Bluffton	Wells
Talbott, Dan E.	Indianapolis	Marion
Tanner, Henry S.	Indianapolis	Marion
Taraba, Ralph W.	Bloomington	Owen-Monroe
Tate, Elizabeth	Dunkirk	Jay
Tate, James	Kokomo	Howard
Taub, Robert G.	Michigan City	La Porte
Taube, Jack I.	Indianapolis	Marion
Tavel, Morton E.	Indianapolis	Marion
Taylor, Clifford C.	Indianapolis	Marion
Taylor, Donald R.	Muncie	Delaware-Blackford
Taylor, Everett C.	Upland	Grant
Taylor, Frederic W.	Indianapolis	Marion
Taylor, James A.	Anderson	Madison
Taylor, John R.	Palestine, Ill.	Sullivan
Taylor, M. Reed, Jr.	Howe	LaGrange
Taylor, Robert G.	Fort Wayne	Allen
Taylor, Willis D.	Indianapolis	Marion
Teaboldt, George A., Jr.	Logansport	Cass
Teague, Frank W.	Indianapolis	Marion
Teal, Dorothy D.	Columbus	Bartholomew-Brown
Teegarden, Joseph A., Jr.	East Chicago	Lake
Teixler, Victor A.	Indianapolis	Marion
Templeton, Ames R.	Mishawaka	St. Joseph
Templeton, Ian S.	Indianapolis	Jackson-Jennings
Templer, Jerry W.	Indianapolis	Marion
Templin, David B.	Lowell	Lake
Tennant, David L.	Fort Wayne	Allen
Tepfer, Milton	Indianapolis	Marion
Teplinsky, Louis L.	East Chicago	Lake
TerBush, Edward L.	Logansport	Cass
Terrill, Richard W.	Fort Wayne	Allen
Terry, Lloyd S.	Danville	Hendricks
Terry, Robert H.	Boonville	Warrick
Test, Charles E.	Indianapolis	Marion
Teter, George V.	Indianapolis	Marion
Teters, Melvin S. (S)	Middlebury	Elkhart
Tether, Joseph E.	Indianapolis	Marion
Tetrick, Lain	Portage	Porter
Tharp, Donald W.	Muncie	Delaware-Blackford
Tharpe, Ray G.	Indianapolis	Marion
Thatcher, Hugh K., Jr.	Indianapolis	Marion
Thayer, Benet W.	North Vernon	Jackson-Jennings
Thoman, Rex L.	Indianapolis	Marion
Thomas, Andrew C.	Hobart	Lake
Thomas, Charles R.	Indianapolis	Marion
Thomas, Daniel D.	Gary	Lake
Thomas, E. Paul	Indianapolis	Marion
Thomas, Everett W.	Warsaw	Kosciusko
Thomas, Fred A.	Indianapolis	Marion

Name	City	County
Thomas, Gerald J.	Gary	Lake
Thomas, Lowell I.	Indianapolis	Marion
Thomas, Morris E.	Indianapolis	Marion
Thomas, W. Clayton	Carmel	Hamilton
Thompson, Alfred A. (S)	Tyner	Marshall
Thompson, B. Jay	Marion	Grant
Thompson, Claude N.	Waynetown	Montgomery
Thompson, Frank M.	Columbia City	Whitley
Thompson, John M.	South Bend	St. Joseph
Thompson, John V.	Indianapolis	Marion
Thompson, Joseph F.	Indianapolis	Marion
Thompson, Paul D.	Indianapolis	Marion
Thompson, Robert A.	South Bend	St. Joseph
Thompson, Wayne H.	Indianapolis	Marion
Thompson, Wm. R.	Winamac	Pulaski
Thornton, Harold C.	Indianapolis	Marion
Thornton, Maurice J.	South Bend	St. Joseph
Throop, Frank B.	Indianapolis	Marion
Thurston, Floyd E.	Nashville	Bartholomew-Brown
Ticsay, Bienvenido V.	Michigan City	LaPorte
Tilden, Margaret H.	Evansville	Vanderburgh
Tiley, George A.	Greenwood	Johnson
Tilka, Edward C.	Hammond	Lake
Tindall, George T.	Indianapolis	Marion
Tindall, William R.	Shelbyville	Shelby
Tinsley, Frank W.	Indianapolis	Marion
Tinsley, Walter B. (S)	Indianapolis	Marion
Tinsley, Walter B., Jr.	Indianapolis	Marion
Tipton, William R.	Greencastle	Putnam
Tirman, Wallace S.	South Bend	St. Joseph
Tischer, E. Paul	Indianapolis	Marion
Tisserand, John B., Jr.	Evansville	Vanderburgh
Todd, David D. (S)	LaJolla, Calif.	Elkhart
Tofaute, John L.	Kokomo	Howard
Tomak, Milton E.	Linton	Greene
Tomlin, Hugh M.	Muncie	Delaware-Blackford
Tomusk, August N.	Fort Wayne	Allen
Tondra, John M.	Indianapolis	Marion
Topolgus, James N.	Bloomington	Owen-Monroe
Topping, Malachi C.	Terre Haute	Vigo
Torrella, Jose A.	Indianapolis	Marion
Toumey, Fred L.	Indianapolis	Marion
Tower, James H., Jr.	Shelbyville	Shelby
Tower, Thomas K.	Campbellsburg	Washington
Towles, Jeff H.	Fort Wayne	Allen
Trachtenberg, Lee	Munster	Lake
Tranter, William F.	Ft. Myers, Fla.	Tipton
Traver, Perry C. (S)	South Bend	St. Joseph
Treon, James F. (S)	Aurora	Dearborn-Ohio
Trepagnier, Francis B.	East Chicago	Lake
Trier, Herbert P.	Fort Wayne	Allen
Trimble, John G.	Kokomo	Howard
Trout, Carl J.	Lafayette	Tippecanoe
Trout, David J.	Lafayette	Tippecanoe
Troutwine, William R.	Crown Point	Lake
Troy, Jack M.	Hammond	Lake
Troyer, Dana O.	Goshen	Elkhart
Troyer, George W.	Goshen	Elkhart
Troyer, Marlin L.	South Bend	St. Joseph
Trudgen, Spencer F.	Indianapolis	Marion
Trusler, H. Marshall	Indianapolis	Marion
Trusler, Harold M.	Indianapolis	Marion
Tsatsos, George C.	Oak Park, Ill.	Lake
Tubbs, George R. (S)	Lafayette	Tippecanoe
Tuchman, Joseph H.	Indianapolis	Marion
Tucker, Warren S.	Indianapolis	Marion
Tuholski, James M.	Evansville	Vanderburgh
Turgi, Robert W.	Gary	Lake
Turley, Verne L. (S)	Fowler	Benton
Turner, Anna Goss	Madison	Jefferson-Switzerland
Turner, Harold B. (S)	Bloomfield	Greene
Turner, Isabel B.	Evansville	Vanderburgh
Turner, John P.	Goshen	Elkhart
Turner, Maurice A.	Martinsville	Morgan
Tweedall, Daniel C.	Evansville	Vanderburgh
Tyler, Edward A.	Indianapolis	Marion
Tyler, Frank T. (S)	New Albany	Floyd
Tyner, Harlan H.	Indianapolis	Marion
Tyrrell, Joseph J.	Calumet City, Ill.	Lake
Tyrrell, Thomas C.	Calumet City, Ill.	Lake

U

Ullom, Ralph B.	Indianapolis	Marion
Ulrey, Robert P.	Elwood	Madison
Underwood, George M.	Lafayette	Tippecanoe
Ungemach, Willo F.	Fort Wayne	Allen
Urbanski, Walter P.	Whiting	Lake
Urschel, Dan L.	Mentone	Kosciusko

V

Vagner, S. Bernard	South Bend	St. Joseph
Valderrama, Hugo	Munster	Lake
Valencia, Monico	East Gary	Lake
Valenzuela, Roberto D.	Gary	Lake
Valenzuela, Sofia S.	Gary	Lake
Van Bokkelen, Robert W.	Mooresville	Morgan
Van Buskirk, Edmund L.	Lafayette	Tippecanoe
Van Campen, Warren M.	Huntington	Huntington
Vance, William C.	Terre Haute	Vigo
Van Denbark, Howard M.	Kokomo	Howard
Van Den Bosch, Wallace R.	Lafayette	Tippecanoe
Vandertoll, Donald	Highland	Lake
Vandivier, Robert M.	Indianapolis	Marion
Van Dorn, Myron J.	Indianapolis	Marion
Van Fleet, Josephine	Indianapolis	Marion
Van Fleit, William E.	South Bend	St. Joseph
Van Kirk, John R.	W. Lafayette	Tippecanoe
Van Kirk, Paul P.	Frankfort	Clinton
Van Meter, C. Powell	Indianapolis	Marion
Van Ness, William C.	Summitville	Madison
Van Tassel, Charles J.	Indianapolis	Marion
Van Vactor, Helen D.	Indianapolis	Marion
Van Wienen, John	Martinsville	Morgan
Vaughn, Walter R.	Vincennes	Knox
Veach, Lester W. (S)	Bainbridge	Putnam
Veach, Richard L.	Bainbridge	Putnam
Veach, William L.	Terre Haute	Vigo
Vellios, Frank	Indianapolis	Marion
Venables, Albert J.	Evansville	Vanderburgh
Vergara, Abelardo	Highland	Lake
Vermilya, Robert W.	Lafayette	Tippecanoe
Viehe, Robert W. (S)	Evansville	Vanderburgh
Vietzke, Paul C. F.	Valparaiso	Porter
Vincent, William A.	Evansville	Vanderburgh
Viney, Charles L.	Logansport	Cass
Vingis, Bronie A.	Greenfield	Hancock
Viray, Victoriano G.	Crawfordsville	Montgomery
Visher, John W. (S)	Evansville	Vanderburgh
Vivian, Donald E.	New Castle	Henry
Vlaskamp, Elaine	Muncie	Delaware-Blackford
Vogel, John L.	Columbia City	Whitley
Vogel, Lloyd A., Jr.	Fort Wayne	Allen
Vogel, L. John	Mount Vernon	Posey
Voges, Edward C.	Terre Haute	Vigo
Volan, George J.	Gary	Lake
Vollrath, Victor J.	Indianapolis	Marion
von Asch, George	La Porte	La Porte
von der Lieth, Wm. C.	Vincennes	Knox
Von Der Haar, Gerard	Indianapolis	Marion
VonderHaar, Thomas E.	Evansville	Vanderburgh
Voorhees, Robert J.	Fort Wayne	Allen
Voorhies, McKinley	Gary	Lake
Vore, Hugh A. (S)	Highland	Lake
Vore, Louring W.	Plymouth	Marshall
Vore, Robert E.	Indianapolis	Marion

Name	City	County
Vormohr, Joseph F.	Portland	Jay
Voskuhl, William L.	Charlestown	Clark
Voss, Gert	Muncie	Delaware-Blackford
Voyles, Harry E.	New Albany	Floyd
W		
Wachob, Tom W., Jr.	Kokomo	Howard
Wack, James E.	South Bend	St. Joseph
Wade, Reynolds W.	New Haven	Allen
Wagner, Anabel R.	Lafayette	Tippecanoe
Wagner, Arthur L.	Jasper	Dubois
Wagner, David G.	Goshen	Elkhart
Wagner, Lindley H.	Lafayette	Tippecanoe
Wagner, Richard	Huntington	Huntington
Wagoner, B. D.	Union City	Randolph
Wagoner, Don J.	Burlington	Carroll
Wagoner, George W.	Delphi	Carroll
Wagoner, John R.	Anderson	Madison
Wagoner, Marilyn L.	Burlington	Carroll
Wainscott, Clinton S., Jr.	Indianapolis	Marion
Wait, Jerome H.	Columbia City	Whitley
Waits, Chester L.	Lafayette	Tippecanoe
Waitt, Paul	Sheridan	Hamilton
Walden, Heinz J.	Terre Haute	Vigo
Waldo, Guy H.	Bedford	Lawrence
Waldo, J. Thayer	Indianapolis	Marion
Walerko, Frank M.	St. Paul, Minn.	St. Joseph
Walker, Adolph P.	East Chicago	Lake
Walker, Edwin M., Jr.	South Bend	St. Joseph
Walker, Floyd B.	Fort Wayne	Allen
Walker, Jack M.	Muncie	Delaware-Blackford
Walker, Louis	Greensburg	Decatur
Walker, Robert M.	Rhodesia, Africa	Marion
Walker, Thomas M.	Brownsburg	Hendricks
Wallace, Collins R.	Fort Wayne	Allen
Wallace, Elmer L.	New Albany	Floyd
Wallace, Hawthorne C. (S)	Crawfordsville	Montgomery
Walsh, John H.	Fort Wayne	Allen
Walter, Paul A. F. III	Evansville	Vanderburgh
Walter, Robert F.	Evansville	Vanderburgh
Walters, Charles E.	Mishawaka	St. Joseph
Walters, Jack L.	Franklin	Johnson
Walters, William H.	Michigan City	La Porte
Walther, Joseph E.	Indianapolis	Marion
Walton, F. Richard	Rochester	Howard
Walton, R. Lee	Marion	Grant
Walton, William M.	Indianapolis	Marion
Waltz, Frank C.	Connersville	Fayette-Franklin
Wambo, John M.	Richmond	Wayne-Union
Wanninger, Horace (S)	Richmond	Wayne-Union
Warbinton, Fred P.	Plainfield	Hendricks
Ward, Gerald F.	Fort Wayne	Allen
Ward, James W.	South Bend	St. Joseph
Ward, Robert A.	Tell City	Perry
Ward, Wesley C.	Indianapolis	Marion
Ware, Herbert E.	Muncie	Delaware-Blackford
Ware, John R.	Russiaville	Howard
Warfield, Chester H.	Fort Wayne	Allen
Warman, Alvah P. (S)	Indianapolis	Marion
Warn, William J.	Milan	Ripley
Warneke, Charles H.	Indianapolis	Marion
Warner, Charles L.	Evansville	Vanderburgh
Warren, Carroll B.	Marion	Grant
Warrick, Francis B.	Richmond	Wayne-Union
Warrick, Homer L.	Osceola	St. Joseph
Warriner, James B.	Indianapolis	Marion
Warshaw, Seymour	Columbus	Bartholomew-Brown
Warvel, John H., Jr.	Indianapolis	Marion
Warvel, John H. (S)	Indianapolis	Marion
Washington, Wilbert	Indianapolis	Marion
Wass, Robert W.	Bloomington	Owen-Monroe
Watkins, James K.	Marion	Grant
Watring, Watson G.	Ft. Devens, Mass.	Marion
Watterson, Gerald T.	Connersville	Fayette-Franklin
Way, James A.	Bloomington	Owen-Monroe
Waymire, William M.	Franklin	Johnson
Weaver, Dorothy E.	Indianapolis	Marion
Webb, Harry D.	Anderson	Madison
Webb, Lawrence C.	Dana	Parke-Vermillion
Weber, Edgar H.	Evansville	Vanderburgh
Weber, John R.	Fort Wayne	Allen
Weber, Joseph G. S.	Terre Haute	Vigo
Webster, Paul L.	Lafayette	Tippecanoe
Webster, Robert K.	Brazil	Clay
Weddle, Chas. O.	Lebanon	Boone
Weeks, Patrick H. (S)	Michigan City	La Porte
Weems, Mallory P.	Jeffersonville	Clark
Weida, Jerry M.	Lafayette	Tippecanoe
Weigand, Clayton G.	Indianapolis	Marion
Weinbaum, Jack G.	Terre Haute	Vigo
Weinberg, Benjamin A.	Whiting	Lake
Weinberg, Samuel	Marion	Grant
Weinberger, Myron H.	Palo Alto, Calif.	Marion
Weinland, George C.	Columbus	Bartholomew-Brown
Weinstock, Adolph	Rolling Prairie	La Porte
Weirich, Charles I.	Butler	De Kalb
Weisenberger, Brockton L.	Columbus	Bartholomew-Brown
Weiskopf, Henry S.	Gary	Lake
Weisner, Richard M.	Eaton	Delaware-Blackford
Weiss, Albert E.	Michigan City	La Porte
Weiss, Eugene	South Bend	St. Joseph
Weiss, Henry G. (S)	Evansville	Vanderburgh
Weiss, Louis L.	Anderson	Madison
Weitemier, Raymond A.	Richmond	Wayne-Union
Weitzel, Roland E.	Princeton	Gibson
Welborn, Mell B.	Evansville	Vanderburgh
Welch, Norbert M.	Vincennes	Knox
Weldy, Bryce P.	Hartford City	Delaware-Blackford
Weller, Ralph D.	Rossville	Clinton
Weller, Wendell A.	Lafayette	Tippecanoe
Wells, William R.	Princeton	Gibson
Wenger, James E.	Nappanee	Elkhart
Wenzler, Paul J.	Bloomington	Owen-Monroe
Werry, Leslie E. (S)	Hartford City	Delaware-Blackford
Wertenberger, Morris D.	Richmond	Wayne-Union
Wesemann, Merrill M.	Franklin	Johnson
West, Joseph L.	Indianapolis	Marion
West, Roger F.	Terre Haute	Vigo
Westerman, Richard L.	Evansville	Vanderburgh
Westfall, B. Kemper	Indianapolis	Marion
Westfall, George S.	Goshen	Elkhart
Westhaysen, Peter V.	Munster	Lake
Weybright, William L.	Maharashtra State, India	Delaware-Blackford
Wharton, Russell O. (S)	Gary	Lake
Wheeler, Barth E.	Huntington	Huntington
Wheeler, Byron C.	Terre Haute	Vigo
Wheeler, David E.	Indianapolis	Marion
Wheeler, Edward C.	Indianapolis	Marion
Whitaker, Jack D.	Anderson	Madison
Whitcomb, Roger F.	Shelbyville	Shelby
White, Donald G.	South Bend	St. Joseph
White, Donald J.	Indianapolis	Marion
White, Douglas H.	Indianapolis	Marion
White, Gene A.	Indianapolis	Marion
White, Gilbert H., Jr.	Hammond	Lake
White, Gordon O.	New Castle	Henry

Name	City	County
White, Harvey E.	Farmland	Randolph
White, Isaac D. (S)	Anaheim, Calif.	Parke-Vermillion
White, John B., Jr.	Indianapolis	Marion
White, John P., Jr.	Bloomington	Owen-Monroe
Whitlock, Coleman M., Jr.	Elkhart	Elkhart
Whitlock, Merle E.	Mishawaka	St. Joseph
Wiatt, Leonard H.	Knightstown	Henry
Wick, Alfred A.	Fort Wayne	Allen
Wickstrom, Otto W., Jr.	Columbus	Bartholomew-Brown
Wickstrom, Otto W.	Columbus	Bartholomew-Brown
Widdifield, G. E.	Indianapolis	Marion
Wierzalis, Edward F.	Fort Wayne	Allen
Wiethoff, Clifford A.	Seymour	Jackson-Jennings
Wigh, Russell	Columbus	Bartholomew-Brown
Wiland, Olin K.	Richmond	Wayne-Union
Wilbrandt, Hans R.	Indianapolis	Marion
Wilder, Gordon B.	Anderson	Madison
Wilhelm, Agatha M.	South Bend	St. Joseph
Wilhelm, Guido P.	New Castle	Henry
Wilhelmus, C. Kenneth	Evansville	Vanderburgh
Wilhelmus, Gilbert M.	Evansville	Vanderburgh
Wilkens, Irvin W.	Indianapolis	Marion
Willan, Horace R. (S)	Martinsville	Morgan
Willard, Richard	Bluffton	Wells
Willardo, Albert T.	Munster	Lake
Williams, Alexander S.	Gary	Lake
Williams, Berniece M.	Fort Wayne	Allen
Williams, Carl N.	Gary	Lake
Williams, Clifford L.	Indianapolis	Marion
Williams, Charles D.	Indianapolis	Marion
Williams, Earl K.	Frankfort	Clinton
Williams, Edwin D.	Gary	Lake
Williams, Everett W.	Columbus	Bartholomew-Brown
Williams, Francis M.	Anderson	Madison
Williams, Fred R.	Gary	Lake
Williams, Harold W.	Indianapolis	Marion
Williams, Howard S.	Indianapolis	Marion
Williams, Hugh L.	Indianapolis	Marion
Williams, John H.	Worthington, Ohio	LaGrange
Williams, Paul A.	Rensselaer	Jasper
Williams, Paul D.	Indianapolis	Marion
Williams, Robert D.	Markleville	Madison
Williams, Robert H.	Anderson	Madison
Willis, Charles F.	Evansville	Vanderburgh
Willison, George W.	Evansville	Vanderburgh
Willner, Alan	Clarksville	Clark
Wills, Max	Auburn	De Kalb
Wilms, John H.	W. Lafayette	Tippecanoe
Wilson, David	Evansville	Vanderburgh
Wilson, Douglas J.	Mishawaka	St. Joseph
Wilson, Fred L.	Terre Haute	Vigo
Wilson, Fred M.	Indianapolis	Marion
Wilson, James M.	South Bend	St. Joseph
Wilson, John	Columbia City	Whitley
Wilson, John D.	Evansville	Vanderburgh
Wilson, Ned A.	Marion	Grant
Wilson, Norman J.	Crown Point	Lake
Wilson, Norman K.	Kokomo	Howard
Wilson, Oliver R.	Morgantown	Morgan
Wilson, Orley E.	Elkhart	Elkhart
Wilson, Paul H.	Logansport	Cass
Wilson, Ralph	Evansville	Vanderburgh
Wilson, Roland B.	Fort Wayne	Allen
Wilson, Wymond B.	Mentone	Kosciusko
Wimmer, Robert N. (S)	Michigan City	Lake
Wince, Leland L.	Muncie	Delaware-Blackford
Wind, Joseph L.	South Bend	St. Joseph
Wing, Herman	Gary	Lake
Winklepleck, A. M.	Connersville	Fayette-Franklin
Winter, Donald K.	Logansport	Cass
Winter, William P.	Martinsville	Morgan
Wirey, Harold R.	Indianapolis	Marion
Wise, Charles L.	Camden	Carroll
Wise, William R.	Indianapolis	Marion
Wiseheart, Robert H.	Lebanon	Boone
Wiseman, V. Earle (S)	Greencastle	Putnam
Wishard, Wm. N., Jr.	Indianapolis	Marion
Witt, William R.	Jeffersonville	Clark
Wixted, John F.	South Bend	St. Joseph
Wixted, Julia L.	South Bend	St. Joseph
Wiza, Edward J., Jr.	Muncie	Delaware-Blackford
Woerner, Thomas E.	Indianapolis	Marion
Wohlfeld, Julius B.	Bedford	Lawrence
Wojcik, Ladislas D.	Marion	Grant
Wolf, Harry C.	Indianapolis	Marion
Wolf, William E.	La Porte	La Porte
Wolfe, Morton F.	New Albany	Floyd
Wolfe, Nelson A.	New Albany	Floyd
Wolfram, Don J.	Indianapolis	Marion
Wolverton, George M.	Clarksville	Clark
Woner, John W.	Linton	Greene
Wong, Norman F.	Lafayette	Tippecanoe
Wong, Samuel N.	Hammond	Lake
Wood, Donald E.	Indianapolis	Marion
Wood, Opal L.	Brazil	Clay
Woodall, Robert L.	Evansville	Vanderburgh
Woodard, Abram S., Jr.	Indianapolis	Marion
Woodbury, Clarence R.	Anderson	Madison
Woodbury, John W.	Marion	Grant
Wooden, Thomas F.	Munster	Lake
Woods, Arba L. (S)	Evansville	Posey
Woodson, Dan E.	Evansville	Vanderburgh
Woodward, Ben E.	Evansville	Vanderburgh
Woodward, William M.	Gary	Lake
Woolery, Richard H.	Bedford	Lawrence
Woolling, Kenneth R.	Indianapolis	Marion
Work, Bruce A., Jr.	Ann Arbor, Mich.	Clinton
Work, Bruce A.	Frankfort	Clinton
Worley, Ansel C. (S)	Ft. Lauderdale, Fla.	Allen
Worley, Henry L.	New Albany	Floyd
Worley, Joseph P.	Indianapolis	Marion
Worth, C. Willard	Milroy	Rush
Wray, James B.	Indianapolis	Marion
Wrege, Malcolm L.	Indianapolis	Marion
Wright, Cecil S. (S)	Anderson	Madison
Wright, James J.	Indianapolis	Marion
Wright, J. Wm., Jr.	Indianapolis	Marion
Wright, Wm. C. (S)	Fort Wayne	Allen
Wu, Stewart	Valparaiso	Porter
Wunsch, Charles M.	Indianapolis	Marion
Wurster, Herbert C.	Mishawaka	St. Joseph
Wyatt, James L., III	Fort Wayne	Allen
Wynegar, David E.	Richmond	Wayne-Union
Wynn, Justice F. (S)	Evansville	Vanderburgh
Wyttenbach, John E.	Indianapolis	Marion

Y

Yacko, Michael L.	Indianapolis	Marion
Yale, Charles A.	Fairmount	Grant
Yanson, Mannfredo R. S.	Oxnard, Calif.	Lake
Yast, Charles J.	Gary	Lake
Yegerlehner, Roscoe S.	W. Lafayette	Newton
Yingling, Robert J.	Indianapolis	Marion
Yocum, Paul S., Sr.	Coral Gables, Fla.	Steuben
Yocum, Paul S., Jr.	Gary	Lake
Yocum, William S.	Gary	Lake
Yoder, C. Richard	Elkhart	Elkhart
Yoder, Carl J.	Middlebury	Elkhart
Yoder, Dewey D.	Pierceton	Whitley
Yoder, Johnathan G.	Middlebury	Elkhart
Yoder, Richard P.	Bluffton	Wells

Name	City	County
Young, C. Curtis, Jr.	Evansville	Vanderburgh
Young, Don J.	Indianapolis	Marion
Young, George M.	Gary	Lake
Young, Gerald S.	Muncie	Delaware-Blackford
Young, James W.	Indianapolis	Marion
Young, John E.	Indianapolis	Marion
Young, John M.	Indianapolis	Marion
Young, John T.	Indianapolis	Marion
Young, Joseph W.	Greenwood	Johnson
Young, Robert G.	Marion	Grant
Young, Robert L.	Gary	Lake
Youngs, Paul E.	New Albany	Floyd
Yunker, Philip E.	Howe	LaGrange

Z

Zahrt, Frank H.	LaPorte	LaPorte
Zalac, Donald A.	Michigan City	La Porte
Zallen, Stanley G.	Hammond	Lake
Zaring, Byron K.	Columbus	Bartholomew-Brown
Zehr, Noah (S)	Fort Wayne	Allen
Zeier, Francis G.	Evansville	Vanderburgh
Zeiger, Irvin L.	South Bend	St. Joseph
Zeitler, Philip S.	Elkhart	Elkhart
Zell, Evertson H.	Indianapolis	Marion
Zeman, Ruth E.	Indianapolis	Marion
Zeps, E. Frances	Indianapolis	Marion
Zerfas, Charles P. A.	Beech Grove	Marion
Zerfas, Phyllis K.	Acton	Marion
Zimmer, Henry J.	Mishawaka	St. Joseph
Zimmerman, Harold	Evansville	Vanderburgh
Zimmerman, Wm. H.	Syracuse	Elkhart
Zink, Robert O.	Madison	Jefferson-Switzerland
Ziperman, H. Haskell	Canal Zone	Marion
Zivich, John M.	East Chicago	Lake
Ziss, Robert C.	Evansville	Vanderburgh
Zore, Joseph J.	Richmond	Wayne-Union
Zucker, Edward	Gary	Lake
Zweig, Elmer S.	Fort Wayne	Allen
Zwerner, Paul F.	Terre Haute	Vigo
Zwick, Harold F.	Decatur	Adams
Zwickel, Ralph E.	Evansville	Vanderburgh
Zydlo, Stanley M.	Wabash	Wabash

ROSTER OF MEMBERS BY COUNTIES

Physicians are listed in the county medical society in which they hold membership.

(Paid-up members of the Indiana State Medical Association as of May 1, 1967.)

ADAMS COUNTY

Berne

(*Zip Code* 46711)

Beaver, Norman E. .....165 W. Water St.
Boze, Robert L. .....265 W. Water St.
Dester, Herbert E. (S).....424 Compromise St.
Graber, Martin J.....265 W. Water St.

Decatur

(*Zip Code* 46733)

Burk, James M.....115 N. Third St.
Carroll, John C.....226 S. Second St.
Doan, John E. .....222 S. Second St.
Freeby, C. William.....227 S. Second St.
Girod, Arthur H.....203 N. 12th St.
Kohne, Gerald J.....134 S. Third St.
Parrish, Richard K.....238 S. Second St.
Reppert, Roland L.....222 S. Second St.
Rich, Norval S.....415 W. Madison
Zwick, Harold F.....227 S. Second St.

ALLEN COUNTY

Fort Wayne

(*Zip Code* 468 *plus zone number*).

A

Acker, Herbert K...617 W. Washington Blvd. (02)
Adams, E. Wade.....3124 E. State Blvd. (05)
Ahlbrand, Roland C...1417 N. Anthony Blvd. (05)
Aiken, Arthur F.....3010 E. State Blvd. (05)
Aiken, Nevin E.....3010 E. State Blvd. (05)
Aldred, Allen W.....3636 Rosewood Dr. (04)
Anderson, Ernest....4349 S. Anthony Blvd. (06)
Anderson, Garland D.....5015 Riviera Ct. (05)
Andrew, Jerald L.....5717 S. Anthony Blvd. (06)
Arata, James A.....730 W. Berry St. (04)
Arata, Justin E.....3124 E. State Blvd. (05)
Ashman, William C...2902 S. Fairfield Ave. (07)
Aust, Charles H.....Lutheran Hospital (07)

B

Bahr, Robert E.....3217 Lake Ave. (05)
Bailey, Paul P. (S) .206 Medical Center Bldg. (02)
Ball, John R.....320 Medical Center Bldg. (02)
Ball, Margaret Jane....4112 S. Harrison St. (07)
Baltes, Joseph H.....821 Broadway (02)
Barch, John W.....1301 S. Harrison St. (02)
Bash, Wallace E.....2902 Fairfield Ave. (07)
Baumgartner, Jeraldine.515½ W. Wayne St. (02)
Beams, Ralph H...715 Medical Center Bldg. (02)
Beierlein, Karl M.....3124 E. State Blvd. (05)
Beights, Raymond S.....3310 E. State Blvd. (05)
Bergendahl, Emil H.
102 Medical Center Bldg. (02)
Berghoff, James R.....306 E. Jefferson St. (02)
Beutler, Theodore V.....527 W. Berry St. (02)
Bierman, Gilbert H.
402 Medical Center Bldg. (02)
Billingsley, John S.....2902 Fairfield Ave. (07)
Bixler, James A.....3124 E. State Blvd. (05)
Blichert, Peter A...424 Medical Center Bldg. (02)
Bossard, John W...111 Medical Center Bldg. (02)
Bower, Richard E.....3610 Brooklyn Ave. (07)
Bowers, Gah T.....3000 Circumurban Blvd. (05)
Bowers, George W.....2902 Fairfield Ave. (07)
Bowers, Jesse W. (S).....418 Gettle Bldg. (02)
Brandt, William E.....618 W. Berry St. (02)
Braunlin, Robert J..418 Medical Center Bldg. (02)
Bridges, William L..520 Medical Center Bldg. (02)
Bromley, Luman W.....2730 E. State Blvd. (05)
Brosius, Robert H. W.....1603 Wells St. (08)
Brown, Frederic W.....2609 Fairfield Ave. (07)
Brown, Garland R.....5522 Hamilton Rd. (05)
Brucker, Perry A...304 Medical Center Bldg. (02)
Bryan, Franklin A..512 Medical Center Bldg. (02)
Buckner, George D.....1003 Fulton St. (02)
Burkhart, Charles A...1301 S. Harrison St. (02)

C

Carlo, Ernest R. (S)....2902 Fairfield Ave. (07)
Chambers, Alan R.....601 W. Wayne St. (02)
Chase, James A.....1635 Broadway (04)
Clark, William R.....3622 S. Calhoun St. (07)
Cochran, Harry A., Jr...1301 S. Harrison St. (02)
Conley, John E. (S).....620 W. Berry St. (02)
Connelly, Jerry H.....3217 Lake Ave. (05)
Connelly, Richard D.....3217 Lake Ave. (05)
Cooney, Charles J.....527 W. Berry St. (02)
Cottrell, Robert F...234 Medical Center Bldg. (02)
Craig, Richard M.....2902 Fairfield Ave. (07)
Cuff, Steve C.....700 Broadway (04)
Cullison, Charles W.....1301 S. Harrison St. (02)
Culp, John E.....2902 Fairfield Ave. (07)

D

Datzman, Richard C.
520 Medical Center Bldg. (02)
Dauscher, Dean D.....4628 S. Calhoun St. (07)
Davidoff, Manuel A.....3610 Brooklyn Ave. (07)
Donesa, Antonio B.....534 W. Berry St. (02)
Dunstone, Harry C..502 Medical Center Bldg. (02)

E

Elston, Lynn W. (S)
604 Medical Center Bldg. (02)
Elston, Ralph W...604 Medical Center Bldg. (02)
Engleman, Reinhold....1301 S. Harrison St. (02)
Epps, James H.....2330 Beacon St. (05)

F

Farquhar, John S., Jr...3610 Brooklyn Ave. (07)
Ferguson, Arthur N.....2902 Fairfield Ave. (07)
Fichman, Abraham M.....323 W. Berry St. (02)
Flaherty, Robert A.....2902 Fairfield Ave. (07)
Foy, Thomas D.....1104 W. State Blvd. (08)
Frankhouser, C. M. A., Jr.
520 Medical Center Bldg. (02)
Fullam, Richard G..234 Medical Center Bldg. (02)

G

Garton, Harry W. (S)
3603 W. Hamilton Rd., R. R. 6
Gastineau, David C.
520 Medical Center Bldg. (02)
Gentile, Jonathan Paul..2716 Fairfield Ave. (07)
Gerding, William J...2638 S. Anthony Blvd. (06)
Giffin, Charles S...102 Medical Center Bldg. (02)
Gladstone, Naf H.....335 W. Berry St. (02)
Glassley, Stephen H.....3010 E. State Blvd. (05)
Glock, Maurice E...229 Medical Center Bldg. (02)
Glock, Wayne R.....2609 Fairfield Ave. (07)
Goebel, Carl W.....327 W. Creighton Ave. (07)
Gould, John C.....2424 Fairfield Ave. (07)
Graham, George M.....1301 S. Harrison St. (02)
Graham, James C.....1834 S. Lafayette (03)
Green, Robert F.....614 W. Berry St. (02)

Greenlee, Robert L...227 E. Washington St. (02)
Griest, Walter D.....3024 Fairfield Ave. (04)
Griffith, Harold R..520 Medical Center Bldg. (02)

H

Hackett, Walter G...6028 U. Huntington Rd. (04)
Haffner, Herman G.....202 E. Jefferson St. (02)
Halaby, Fouad A.....730 W. Berry St. (04)
Haley, Alvin J.....3217 Lake Ave. (05)
Hall, William R...234 Medical Center Bldg. (02)
Haller, Richard C.....3124 E. State Blvd. (05)
Hamilton, Emory D.
234 Medical Center Bldg. (02)
Hamilton, George M.....3124 E. State Blvd. (05)
Hasewinkle, August M...2828 E. State Blvd. (05)
Hastings, Warren C.
111 Medical Center Bldg. (02)
Hattendorf, Anton P.
716 Medical Center Bldg. (02)
Havens, Russell E..228 Medical Center Bldg. (02)
Hershberger, Philip G..2609 Fairfield Ave. (07)
Hickman, Donald M.....3217 Lake Ave. (05)
Hillery, Robert L.....942 Ridgewood Dr. (05)
Hipskind, Richard E....123 W. Rudisill Blvd. (07)
Hoffman, Arthur F.
519 Medical Center Bldg. (02)
Holsinger, Robert E.
115 Medical Center Bldg. (02)
Hoover, Joseph R.....3610 Brooklyn Ave. (07)
Howe, Fordyce L.....1525 Oxford St. (06)
Humphreys, John L.....1301 S. Harrison St. (02)

I

Irmscher, George W...1417 N. Anthony Blvd. (05)
Irmscher, Jane M.....2024 Florida Dr. (05)
Isenogle, Kenneth F.
418 Medical Center Bldg. (02)

J

Jackson, John F...519 Medical Center Bldg. (02)
Johnston, Richard M.....2330 Beacon St. (05)
Jontz, Joe G.....3124 E. State Blvd. (05)
Jontz, Richard L...520 Medical Center Bldg. (02)
Juergens, Richard B.....1709 Prairie Lane (08)
Jurgensen, Walter T.....3415 Fairfield Ave. (07)

K

Karol, Herbert J...324 Medical Center Bldg. (02)
Kaufman, Julian R.....3124 E. State Blvd. (05)
Keck, Carleton A.....2902 Fairfield Ave. (07)
Kent, Richard N...731 Medical Center Bldg. (02)
Keyes, Robert C.....3714 S. Calhoun St. (07)
Kidder, Orva T.....Irene Byron Hospital (08)
Kilgore, Byron.....2330 Beacon St. (05)
Kimbrough, Robert F...2730 E. State Blvd. (05)
Kleifgen, William A.....446 W. Pontiac St. (07)
Kleopfer, Ronald G.....3124 E. State Blvd. (05)
Klooze, Kenneth W.....3610 Brooklyn Ave. (07)
Knight, Lewis W.....3124 E. State Blvd. (05)
Krueger, John E.....5717 S. Anthony Blvd. (06)
Kruse, Walter E. (S).....410 McKinnie (06)

L

Ladig, Donald S.....337 E. Berry St. (02)
Laker, Gene C.....2407 Fairoak Dr. (07)
Laker, Richard J.....2407 Fairoak Dr. (07)
Lampe, Elfred H.....2902 Fairfield Ave. (07)
Laycock, Richard M.....6642 St. Joe Rd. (05)
Lee, John W.....3124 E. State Blvd. (05)
Leming, Ben L.....2902 Fairfield Ave. (07)
Lenk, George G.....1805 E. Washington St. (04)
Lloyd, Robert P.....723 Fulton St. (02)
Logan, Richard S.....3124 E. State Blvd. (05)
Lohman, Robert M.....4017 S. Wayne St. (06)
Lorman, James G...520 Medical Center Bldg. (02)
Loudermilk, Jack L..520 Medical Center Bldg. (02)
Lyon, William C.....710 W. Wayne St. (04)

M

McCallister, John W.....3124 E. State Blvd. (05)
McCoy, Roy R.....3701 S. Harrison St. (07)
McDowell, George A.
215 Medical Center Bldg. (02)
McEachern, Cecil G.....2424 Fairfield Ave. (07)
McKeeman, Donald H.....633 W. Wayne St. (02)
Mackel, Frederick O.....2609 Fairfield Ave. (07)
Mann, Richard E.....3124 E. State Blvd. (05)
Manning, George C.....534 W. Berry St. (02)
Marsh, M. Frederick..1417 N. Anthony Blvd. (05)
Marshall, Caesar L.....438 E. Lewis St. (02)
Mastrangelo, Michael J.
306 Medical Center Bldg. (02)
Mensch, James R.....2120 Forest Park (05)
Mercer, Samuel R..702 Medical Center Bldg. (02)
Meyer, Herman A.....1030 W. Wayne St. (04)
Meyer, Theodore O..622 Medical Center Bldg. (02)
Michaelis, Stephen C.....3610 Brooklyn Ave. (07)
Miller, Don E.....2902 Fairfield Ave. (07)
Miller, H. Paul.....2715 Broadway (07)
Miller, Mahlon F...222 Medical Center Bldg. (02)
Miller, Orval J.....324 W. Berry St. (02)
Miller, Richard H.....511 W. Wayne St. (02)
Miller, Robert B.....3124 E. State Blvd. (05)
Miller, William J.....2902 Fairfield Ave. (07)
Moats, Carl F.....4007 W. Wayne St. (04)
Moats, George E. (S)
615 E. Washington Blvd. (02)
Moeller, Victor C.....2424 Fairfield Ave. (07)
Morey, Edwin E.....2902 Fairfield Ave. (07)
Morgan, Milton M.....1147 S. Lafayette St. (02)
Mortenson, Leland J.....3610 Brooklyn Ave. (07)
Mueller, Lawrence W.
533 W. Washington Blvd. (02)
Murdock, Harvey L. (S)
417 Medical Center Bldg. (02)

N-O

Nill, John H.....5717 S. Anthony Blvd. (06)
Nolan, Gerald R.....5717 S. Anthony Blvd. (06)
Oatman, Jack G....334 Medical Center Bldg. (02)
O'Brian, John F.....3217 Lake Ave. (05)
O'Rourke, Carroll.....604 W. Berry St. (02)

P

Painter, Donald S...222 Medical Center Bldg. (02)
Parker, Carey B. (S)..1105 S. Harrison St. (02)
Parrot, Donald J.....810 W. State Blvd. (08)
Patterson, Jack W.....717 Broadway (02)
Pauly, Leonard R.....2224 Springfield (05)
Pearson, Huey L.....2314 S. Hanna (03)
Perrin, Kermit F.....2701 S. Anthony Blvd. (06)
Perry, Frederic G.....2902 Fairfield Ave. (07)
Pickett, Merle E...228 Medical Center Bldg. (02)
Popp, Milton F.....606 Medical Center Bldg. (02)
Powell, M. Jack.....700 Broadway (02)
Priddy, Marvin E.....5010 Riviera Court (05)

Q-R

Rank, William B.....347 W. Berry St. (02)
Reed, John D.....3124 E. State Blvd. (05)
Reszel, Paul A.....3124 E. State Blvd. (05)
Rhee, Sang K.....1930 Hobson Rd. (05)
Richards, Alan D.....4628 S. Calhoun St. (07)
Rissing, Walter J.....229 W. Berry St. (02)
Rockey, Noah A. (S)....1224 E. State Blvd. (05)
Roser, Arthur J.....801 E. State Blvd. (05)
Rossiter, Dudley L. (S).3629 S. Harrison St. (07)
Rothberg, Maurice.....625 W. Berry St. (02)
Rousseau, John W.....3124 E. State Blvd. (05)

S

Sahlmann, Hans (S)....3418 S. Hanna St. (06)
Salon, Harry W.....535 W. Berry St. (02)
Salon, Joel W.....604 W. Wayne St. (02)
Salon, Nathan L.....604 W. Wayne St. (02)
Sarver, Francis E..320 Medical Center Bldg. (02)

Savage, Arthur R.....302 W. Berry St. (02)
Schaab, Eric.....3714 S. Calhoun St. (07)
Schlademan, Karl R.
520 Medical Center Bldg. (02)
Schleinkofer, Robert M..2828 E. State Blvd. (05)
Schloss, Robert P.....5717 S. Anthony Blvd. (06)
Schmidt, Eugene E..228 Medical Center Bldg. (02)
Schmoll, Robert J.....521 W. Wayne St. (02)
Schneider, Louis A.....730 W. Berry St. (02)
Schoen, Frederic L...5717 S. Anthony Blvd. (06)
Schoenhals, Charles E.....5431 Vance Ave. (05)
Schubert, Jerome C.....2154 Fairfield Ave. (04)
Scott, H. Vaughn.....801 E. State St. (08)
Scudder, James P.....3124 E. State Blvd. (05)
Senseny, Eugene F.....2902 Fairfield Ave. (07)
Shaw, James E.....3610 Brooklyn Ave. (07)
Shinabery, Lawerence.....1850 Broadway (04)
Short, John T. (S).....2908 Shawnee Dr. (07)
Shugart, Robert R.....2609 Fairfield Ave. (07)
Singer, Elmer C. (S)
310 Medical Center Bldg. (02)
Sirlin, Edward M.....2615 Trier Rd. (05)
Smith, C. Curtis....3408 N. Anthony Blvd. (05)
Smith, Philip L.....2902 Fairfield Ave. (07)
Smith, Roger C.....3124 E. State Blvd. (05)
Snyderman, Sanford C.
102 Medical Center Bldg. (02)
Somers, Gerald H.....3610 Brooklyn Ave. (07)
Spencer, C. Herbert
519 Medical Center Bldg. (02)
Stanley, Robert G.....3415 S. Fairfield Ave. (07)
Stauffer, Richard C.....2730 E. State Blvd. (05)
Steigmeyer, David J.....3124 E. State Blvd. (05)
Stier, Paul L.....721 Broadway (02)
Stucky, Jerry L.....5010 Riviera Court (05)
Sullivan, Robert E..214 Medical Center Bldg. (02)

T

Taylor, Robert G.....2902 Fairfield Ave. (07)
Tennant, David L.....1832 S. Calhoun St. (04)
Terrill, Richard W.....446 W. Pontiac St. (07)
Tomusk, August N.
306 Medical Center Bldg. (02)
Towles, Jeff H.....710 E. Pontiac (03)
Trier, Herbert P...612 Medical Center Bldg. (02)

U

Ungemach, Willo F.....332 Pontiac (03)

V-W

Vogel, Lloyd A.....519 Medical Center Bldg. (02)
Voorhees, Robert J..701 Medical Center Bldg. (02)
Walker, Floyd B.....3505 S. Monroe (06)
Wallace, Collins R..234 Medical Center Bldg. (02)
Walsh, John H.....2902 Fairfield Ave. (07)
Ward, Gerald F.....3124 E. State Blvd. (05)
Warfield, Chester H...7024 Forest Wood Dr. (05)
Weber, John R.....710 W. Wayne St. (04)
Wick, Alfred A.....623 Medical Center Bldg. (02)
Wierzalis, Edward F.....2017 Sherman St. (08)
Williams, Berniece M.....801 E. State Blvd. (05)
Wilson, Roland B.....1207 S. Lafayette (02)
Wright, William C. (S)
621 Medical Center Bldg. (02)
Wyatt, James L., III....206 E. Jefferson St. (02)

X-Y-Z

Zehr, Noah (S).....301 W. Creighton (07)
Zweig, Elmer Sam.....344 W. Berry St. (02)

Harshman, Louis P. (S).....R. R. 6, Frankfort (46041)
Harvey, Harry C. (S)..Methodist Home, Franklin (46131)
Emme, Richard W.....Harlan (46743)
Harless, O. Fred.....104 Summit, Monroeville (46773)

New Haven

(*Zip Code* 46774)

Dahling, Clemens W.....Dahling Bldg.
Dahling, Fred W.....Dahling Bldg.
Hoetzer, Eldore M.....502 Henry
Sidell, James P.....1208 Lincoln Highway E.
Stumpf, Edwin E.....716 Broadway
Wade, Reynolds W.....1018 Bell Ave.

Schubert, Philip C.....Roanoke (46783)
Miller, Kenneth D.....Woodburn (46797)

Bollheimed, Don A.
5483 Sanger Ave., #12, Alexandria, Va. (22311)
Clark, William R., Jr.
253 S.F. Clarkdale, Ft. Lewis, Wash. (98421)
Emenhiser, Donald C.
805 Westwood Lane, Wilmette, Ill. (60091)
Miller, Edward D.
3575 Westbury Rd., Birmingham, Ala. (35223)
Prentiss, Nelson H...V. A. Hospital, Oteen, N. C. (28805)
Sherwood, Clarence E.
R. R. #2, Box 97A, Madison, S. Dakota (57042)
Sherwood, J. Vincent
229 Shangri-La, Largo, Fla. (33540)
Worley, Ansel C. (S)
560 N.W. 72nd Ave., Ft. Lauderdale, Fla. (33313)

BARTHOLOMEW-BROWN COUNTIES

Columbus

(*Zip Code* 47201)

Able, Walter.....2760 25th St.
Adler, David L.....Bartholomew County Hospital
Andrews, Fred B.....Doctors' Park
Beggs, Lowell F.....832 Washington St.
Clay, Eleanor.....2739 Central Ave.
Daugherty, Forest D.....2600 Sandcrest Blvd.
Davis, Marvin R.....908 Washington
Dugan, Thomas.....Doctors' Park
Echsner, Herman J.....Doctors' Park
Fisher, Walter S. (S).....422 Ninth St.
Fortner, Ray E.....Doctors' Park
Fuller, Robert G.....Doctors' Park
Gammell, Lindley L.....602 22nd St.
Hauersperger, Alfred D.....2760 25th St.
Hawes, Marvin E.....522 Seventh Ave.
Henry, Alvin L.....Doctors' Park
Holden, Robert W.....2438 Cottage Ave.
Jacobs, E. Robert.....1829 California St.
Knotts, Halleck S.....1813 25th St.
Krueger, Robert B.....2739 Central Ave.
Libbert, Edwin L.....3377 Woodland Pl.
McCullough, Henry G...R. R. #4, Old Indpls. Rd.
Macy, George W.....2760 25th St.
Marr, Griffith.....R. R. #1
Mohler, Floyd W.....2739 Central Ave.
Norton, Harold J.....909 Pearl St
O'Bryan, Richard B.....2739 Central Ave.
Overshiner, Lyman (S).....1817 Seventh St.
Ranck, Benjamin A.....2600 Sandcrest Blvd.
Rau, Charles A.....2600 Sandcrest Blvd.
Reid, Robert M.....2225 Central Ave.
Richmond, Harold W...Cummins Engine Co., Inc.
Ryan, C. David.....2600 Sandcrest Blvd.
Ryan, William J.....Doctors' Park
Sandlin, Donald L.....2530 Sandcrest Blvd.
Schmitt, Richard K.....423 Ninth St.
Schneider, Kenneth D.....2760 25th St.
Sigmund, William B.....2355 Central Ave.
Snapp, Richard A.....2225 Central Ave.
Stribling, James L.....2600 Sandcrest Blvd.
Teal, Dorothy D.....728 Franklin St.
Warshaw, Seymour.....2760 25th St.
Weinland, George C.....R. R. 5, Harrison Lake

Weisenberger, Brockton L.
Cummins Engine Co., Inc.
Wickstrom, Otto W., Jr.....2781 National Rd.
Wickstrom, Otto W.....2779 National Rd.
Wigh, Russell.....2400 E. 17th St.
Williams, Everett W.....2225 Central Ave.
Zaring, Byron K.....718 Washington St.

Seibel, Robert M.....Nashville (47448)
Thurston, Floyd E.....Nashville (47448)

BENTON COUNTY

Leak, Robert H.....Boswell (47921)
Coddens, Avery L.....Earl Park (47942)
Altier, William H.
1721 Hemlock Rd., Lafayette (47906)
Miller, Dan T. (S).....Fowler (47944)
Turley, Verne L. (S).....Fowler (47944)
McKinney, Donald L.....Otterbein (47970)
Stolz, Thomas J...R. R. 1, West Lafayette (47906)
Schuerich, Virgil.....Oxford (47971)

BLACKFORD COUNTY

(See Delaware-Blackford)

BOONE COUNTY

Schaaf, Alvin D.....Jamestown (46147)

Lebanon

(*Zip Code* 46052)

Bennett, Kent B.....1720 N. Lebanon St.
Boyer, Don W.....1125 N. Lebanon St.
Coons, John D. (S)....Boone County Bank Bldg.
Coons, Ritchie.....303 W. Washington St.
Headley, Lloyd M.....1111 N. Lebanon St.
Honan, Paul R.....1720 N. Lebanon St.
Kern, Clarence G.....1720 N. Lebanon St.
Lenox, Jack.....205 East Dr.
McAfee, James R.....1005 N. East St
Mukhtar, Fuad A.....1125 N. Lebanon St.
Perkins, Thornton D.....1122 N. Lebanon St.
Porter, Jack.....1122 N. Lebanon
Weddle, Charles O.....905 N. Lebanon St.
Wiseheart, Robert H.....905 N. Lebanon St.

Bassett, Margaret A.....Thorntown (46071)
Gregg, Edwin E.....Thorntown (46071)
Lovett, Harvey D.....Zionsville (46077)
Bailey, Lawrence S.....Zionsville (46077)
Harvey, Ralph J. (S).....Zionsville (46077)
Jackson, Kathryn A.....Zionsville (46077)

BROWN COUNTY

(See Bartholomew-Brown)

CARROLL COUNTY

Wagoner, Don J.....Burlington (46915)
Wagoner, Marilyn L.....Burlington (46915)
Wise, Charles L.....Camden (46917)

Delphi

(*Zip Code* 46923)

Baker, Eldon E.....109 S. Union St.
Petry, T. Neal.....110 S. Union St.
Seese, Robert M.....101 W. North St.
Wagoner, George W.....Front & Union Sts.

Adams, Max R.....Flora (46929)

CASS COUNTY

Dutchess, C. Toney.....Galveston (46932)

Logansport

(*Zip Code* 46947)

Bailey, Earl W.....212 Fifth St.
Bean, Joseph S.....Memorial Hospital
Burnett, Paul C.....Logansport State Hosp.
Cheng, Sylvia F.....Logansport State Hosp
Chu, Johnson C.S.....Logansport State Hosp.
Eckert, Russell A.....1101 Michigan Ave.
Fogel, Ernest J.....Logansport State Hosp.
Glendening, Richard L.....420-A High St.
Hall, Bernard R.....422 High St.
Harrington, James F.....1001 E. Broadway
Hedde, Eugene L.....211 S. Third St.
Hillis, Lowell J.....718 E. Broadway
Hochhalter, Marian.....2400 Hasty Hyll
Horning, Richard R.....Logansport State Hosp.
Jones, J. Carl.....422 North St.
Karnafel, Eugene T.....Logansport State Hosp.
King, Jay M.....812 North St.
Maschmeyer, Robert H.....Logansport State Hosp.
Morrical, Russell J.....212 Fifth St.
Parker, E. Camille.....2500 E. Broadway
Parker, Francis W., Jr.....2500 E. Broadway
Pfuetze, Max E.....408 North St.
Phipps, Elwood B.....Logansport State Hosp.
Sheller, Tom G.....Logansport State Hosp.
Teaboldt, George A., Jr....Logansport State Hosp.
TerBush, Edward L.....216 Ninth St.
Viney, Charles L.....402 North St.
Wilson, Paul H.....422 North St.
Winter, Donald K.....422 North St.

Newcomb, William K.....Royal Center (46978)
Flanagan, Estle P. (S).....Walton (46994)

CLARK COUNTY

Charlestown

(*Zip Code* 47111)

Goodman, Eli.....807 High St.
Jones, David H.....935 Water St.
Marshall, Thomas J. (S).....807 High St.
Voskuhl, William L.....395 Water St.

Clarksville

(*Zip Code* 47131)

Duque, Fausto.....647 Eastern Blvd.
Mudd, Joseph P.....815 Eastern Blvd.
Willner, Alan.....630 Eastern Blvd.
Wolverton, George M.....647 Eastern Blvd.

Carr, Joseph H.....Henryville (47126)
Greene, William R.....Henryville (47126)

Jeffersonville

(*Zip Code* 47130)

Adair, Samuel L.....201 E. Market St.
Baldwin, John H. (S).....P.O. Box 161
Bizer, Mier A.....1206 N. Spring St.
Brill, Joseph B.....201 E. Market St.
Bruner, Ralph W. (S).....437 Spring St.
Buehler, George M.....431 Locust St.
Byrd, Ryland P.....210 Sparks Ave.
Carlberg, Dale L.....226 E. Maple St.
Carney, Joel T. (S).....347 Spring St.
Clark, William B., Jr.....435 Spring St.
Corrao, Thomas J.....435 Spring St.
Ely, Cecil W.....Clark County Hospital
Forsee, Norman E.....211 E. Market St.
Golden, William Y.....437 Spring St.
Hargett, Herbert P.....435 Spring St.

Havens, A. Lyle.....432 Wall St.
Havens, Thomas R.....432 Wall St.
Horlander, Fridolin.....Gateway Plaza
Huoni, John S...1405 Youngstown Shopping Center
Isler, Nathaniel C.....519 Spring St.
Johnson, Jerome M.....1428 E. 10th St.
McKechnie, Robert K.....432 Wall St.
Oca, Clemente F.....220 Wall St.
Reed, Edsel S.....Clark County Hospital
Reeder, Henry H. (S).....140 N. High St.
Roby, Alma L.....201 E. Market St.
Shaw, Houston W.....435 Spring St.
Weems, Mallory P.....414 Wall St.
Witt, William R.....201 E. Market St.

Sellersburg

(*Zip Code* 47172)

Sturgis, Donald G.....117 S. Indiana Ave.

CLAY COUNTY

Brazil

(*Zip Code* 47834)

Conrad, Everett L.....1207 National Ave.
Farid, Rahim S.....111 N. Walnut St.
Froderman, Stanley E.....1207 National Ave.
McCormick, Wilbur C.....R. R. #2
Maurer, J. Frank.....111 N. Walnut St.
Maurer, Robert M.....111 N. Walnut St.
Mehne, Richard G.....3½ E. National Rd.
Shattuck, John C.....1½ E. National Ave.
Webster, Robert K.....28 N. Franklin St.
Wood, Opal L.....111 N. Walnut St.

Moon, Charles E.....Center Point (47840)
Bond, Walter C. (S).....Clay City (47841)
Buell, Forrest R.....Clay City (47841)
Advincula, Luis.....Box 76, Greencastle (46135)

CLINTON COUNTY

Frankfort

(*Zip Code* 46041)

Applegate, Albert E.....1303 S. Jackson St.
Beardsley, Frank A., Jr.....400 Kentwood Dr.
Carrel, Francis E.....209 S. Columbia St.
Crouse, Ben E.....P.O. Box 363
Dupler, Lee F.....4 E. White St.
Dykhuizen, Theodore A.....201 W. Walnut St.
Erdel, Milton W.....2 E. White St.
Flora, Fred W.....1256 S. Jackson St.
Hammersley, George K.....361 E. Clinton St.
Hedgcock, Robert A.....259 E. Clinton St.
Stout, Harry T.....1256 S. Jackson St.
Van Kirk, Paul P.....1252 S. Jackson St.
Williams, Earl K.....Clinton County Hospital
Work, Bruce A.....306 Peoples Life Bldg.

Bush, Charles E.....Kirklin (46050)
Carlyle, Ivan E. (S).....Michigantown (46057)
Ketcham, John S. (S).....Rossville (46065)
Weller, Ralph D.....Rossville (46065)

Work, Bruce A., Jr.
3092 Williamsburg Rd., Ann Arbor, Mich. (48103)

Holmes, Claude D. (S)
329 Romano St., Coral Gables, Fla. (33134)

CRAWFORD COUNTY

(See Harrison-Crawford)

DAVIESS-MARTIN COUNTIES

Pierce, William J.....Bruceville (47516)
Rohrer, James R.....Elnora (47529)

Loogootee

(*Zip Code* 47553)

Chattin, Robert E.....102 Wood
Lett, Emory B.....408 E. Main

Washington

(*Zip Code* 47501)

Barrett, James W. .....1312 Bedford Rd.
Blazey, Arthur G.....7 E. Walnut St.
Chattin, Vance J.....511 E. Main St.
Farmer, Charles R.....200 E. Main St.
Farris, John J.....514 E. Main St.
Fox, C. Philip.....305 Peoples Bank Bldg.
Lindsay, Hamlin B.....511 E. Main St.
McKittrick, Jack.....Peoples Bank Bldg.
McNaughton, Lawrence M.....400 E. Hefron St.
Norton, Horace O.....511 E. Hefron St.
Rang, Arthur A. (S).....211 N.E. Ninth St.
Rang, Robert H.....1312 Bedford Rd.
Ross, Glenn E.....1307 Bedford Rd.
Schafer, William C.....1312 Bedford Rd.
Schroeder, Henry R., Jr.....101 N.E. First St.
Seat, Marshall H.....2 E. Walnut St.

DEARBORN-OHIO COUNTIES

Aurora

(*Zip Code* 47001)

Baker, Leslie M.....501 Fourth St.
Gresham, Edwin L.....501 Fourth St.
Jackson, John K.....223 Mechanic St.
Olcott, Charles W.....203 Main St.
Treon, James F. (S).....505 Fifth St.

McNeely, Matthew J.....Box 35, Dillsboro (47018)

Lawrenceburg

(*Zip Code* 47025)

Bowen, Gerald T.....209 Fourth St.
Conrad, Henry W.....370 Bielby Rd.
Frable, Frank L., Jr.....370 Bielby Rd.
Houston, Fred D.....30 W. High St.
Hunter, Lowell G.....370 Bielby Rd.
Morrison, George G., Jr.....209 Fourth Ave.
Pfeifer, James M.....319 Front St.
Rhodes, Alfred K.....370 Bielby Rd.
Streck, Francis A.....326 Walnut St.

Fessler, Gordon S.....311 Main St., Rising Sun (47040)
Mauricio, Amado S. A. ...226 Main St., Rising Sun (47040)

DECATUR COUNTY

Greensburg

(*Zip Code* 47240)

Acher, Robert P.....221 E. Washington St.
Callaghan, Winship C.....304 Bates Bldg.
Dickson, Dale D.....333 E. First St.
Miller, James C.....205 Bates Bldg.
Morrison, James T.....207 N. Franklin St.
Overpeck, Charles (S).....Murphy Bldg.
Shaffer, William.....214 N. Franklin St.
Walker, Louis.....215 N. Franklin St.

Porter, Edward A. (S).....Westport (47283)

DE KALB COUNTY

Showalter, John P.....R. R. 5, Angola (46703)

Auburn

(*Zip Code* 46706)

Covell, Harry M.....127 W. Seventh St.
Geisinger, Lewis N. (S).....805 S. Indiana Ave.
Harvey, John C.....405 S. Main St.
Hathaway, C. Bishop.....209 N. Jackson St.
Hines, Archie V. (S).....401 S. Main St.
Hines, John H.....403 Main St.
Hippensteel, Harland V.....208 W. Seventh St.
Nugen, Harold.....223 W. Seventh St.
Rogers, Evered E.....212 W. Sixth St.
Sanders, Jesse A. (S).....1007 S. Main St.
Souder, Bonnell M. (S).....206 W. Seventh St.
Wills, Max.....347 W. Seventh St.

Shultz, Clifford.....Butler (46721)
Weirich, Charles I.....Butler (46721)

Garrett

(*Zip Code* 46738)

Carpenter, Ramesh S.....315 S. Randolph St.
Kantzer, Floyd B. (S).....200 S. Randolph St.
Nason, Robert A.....123 E. King St.
Novy, Charles A.....200 S. Randolph St.

Coleman, Floyd B.....Waterloo (46793)
Graber, Benjamin R. .....Waterloo (46793)
Hughes, William B.....Waterloo (46793)

DELAWARE-BLACKFORD COUNTIES

Brown, Stewart D.....Albany (47320)
Puterbaugh, Karl E.....Albany (47320)
Hurley, John R.....Daleville (47334)
Weisner, Richard M.....R.R. 1, Eaton (47338)
Ko, Richard C. B.....Gaston (47342)
Haggerty, Fred E.
407 Melrose Dr., Greencastle (46135)

Hartford City

(*Zip Code* 47348)

Dodds, James U.....227 W. Main St.
Dudgeon, Charles A.....720 N. Spring St.
Jackson, Dean B.....401 W. Washington St.
Owsley, Guy A.....214 N. High St.
Parks, George O.....720 N. Spring St.
Sulit, Severino T.....214 N. High St.
Weldy, Bryce P.....227 W. Franklin St.
Werry, Leslie E. (S).....1223 N. High St.

Egger, Ross L.....613 N. 10th St., Middletown (47356)
Burns, Paul E.....119 W. High St., Montpelier (47359)
Ingram, Richard
206 S. Main St., Montpelier (47359)

Muncie

(*Zip Code* 473 *plus zone number*)

Adams, Julia L.....Ball State University (06)
Adams, William B.....2810 Ethel Ave. (04)
Alexander, Jack L.....Norwood Office Ct. (04)
Ashburn, Clarence M.....2810 Ethel Ave. (04)
Ball, Clay A. (S).....303 W. Adams St. (05)
Ball, Philip.....2600 W. Jackson St. (03)
Benken, Lawrence D.....1111 W. Jackson St. (05)
Bergwall, Warren L.....223 Tillotson Ave. (04)
Bibler, Henry E.....311 W. Adams St. (05)
Botkin, Charles L. (S)..508 W. Jackson St. (05)
Botkin, Charles T.....400 White River Blvd. (03)
Botkin, Clyde G.....508 W. Jackson St. (05)
Branam, George E.....38 Warwick Rd. (04)
Brown, Leland G.....412 White River Blvd. (03)
Brown, Thomas M.....212 N. Pauline Ave. (03)
Burwell, Stanley W.....424 W. Jackson St. (05)
Butterfield, Robert M...315 W. Jackson St. (05)
Butz, Ralph O.....1525 W. Jackson St. (03)
Clark, Lintner E.....420 W. Washington St. (05)
Clark, Robert M.....2809 Godman Ave. (04)
Cochran, Robert B.....1111 W. Jackson St. (05)
Collins, Margaret C..Ball Memorial Hospital (03)
Cooper, John F.....3022 S. Madison (02)
Covalt, Wendell E.....2724 W. North St. (03)
Cullison, John L.....2724 W. North St. (03)
Cure, Elmer T.....217 S. Cherry St. (05)
David, George J.....2200 Janney Ave. (04)
Deutsch, William....406 White River Blvd. (03)
Dietz, David J.....2810 Ethel Ave. (04)
Dunning, Thomas W.
400½ White River Blvd. (03)
Dutchman, William R.....2810 Ethel Ave. (04)
Fiederlein, Frederick J...2809 Godman Ave. (04)
Galliher, Marjorie J...410 White River Blvd. (03)
Geckler, Charles E.
203 Western Reserve Bldg. (05)
Gibson, Robert K.....806 W. Jackson St. (05)
Goodell, Charles L.....2810 Ethel Ave. (04)
Greiber, Marvin F...420 W. Washington St. (05)
Gustafson, Milton H...2606 W. Jackson St. (03)
Hall, Robert S.....1604 W. McGallaird (04)
Hayes, Theodore R.....210 S. High St. (05)
Henderson, Ramon A.....806 W. Jackson St. (05)
High, Ralph L.....420 W. Washington St. (05)
Holmes, John L.....412 White River Blvd. (03)
Hostetter, Irwin S.....115 N. Cherry St. (05)
Imhof, Joseph D.....320 W. Adams St. (05)
Judd, Donald R.....100 N. Cherry St. (05)
Kalker, Morton.....2810 Ethel Ave. (04)
Kammer, Grace C.....1005 W. Parkway Dr. (04)
Kammer, Walter F...420 W. Washington St. (05)
Kim, Joon S.....Ball Memorial Hospital (03)
Kirshman, Forrest E.....211 S. High St. (05)
Koch, Edwin F., Jr...Ball Memorial Hospital (03)
Koss, K. William.....1600 W. Jackson St. (03)
Kress, James W.....2809 Godman Ave. (04)
LaDuron, Jules F. (S)....614 S. Liberty St. (05)
Lawson, Lawrence J.....110 N. Cherry St. (05)
McCallister, Larry L.....2518 Rosewood (04)
McClintock, James A.....316 W. Adams St. (05)
McDowell, Fletcher W.....926 W. Main St. (05)
Mathewson, Russell C...Box 157, Benton Rd. (02)
Montgomery, Lall G..Ball Memorial Hospital (03)
Montgomery, Ralph F...2809 Godman Ave. (04)
Moore, Jack C.....212 N. Pauline Ave. (03)
Moore, Thomas C.....110 N. Cherry St. (05)
Moore, William C. (S)....110 N. Cherry St. (05)
Morris, Jean W.....222 Stradling Rd. (04)
Neece, Gus W.....Ball State University (06)
Nelson, Harold E.....424 W. Jackson St. (05)
Newnam, Philip E..420 W. Washington St. (05)
Osborne, John V.....420 W. Washington St. (05)
Peacock, Robert C.....2724 W. North St. (03)
Philbert, Richard N.....2810 Ethel Ave. (04)
Pippenger, Joseph I.....310 W. Jackson St. (05)
Pippenger, Wayne G..Ball State University (06)
Quick, William J.....314 E. Washington St. (05)
Rench, Michael J.....41 Colson Dr. (04)
Rittmeyer, Jack L...420 W. Washington St. (05)
Rivers, Glynn A.....625 W. Adams St. (05)
Rivers, Thomas A.....826 W. Adams St. (05)
Schmidt, Robert B.....Ball State University (06)
Schulhof, Maurice G..420 W. Washington St. (05)
Searight, Howard R.....402 W. Jackson St. (05)
Speck, Carlson R...Ball Memorial Hospital (03)
Stanley, John R.....1111 W. Jackson St. (05)

Stout, Francis E.....2423 W. Jackson St. (03)
Stump, Richard L.....2000 S. Madison (02)
Taylor, Donald R...Ball Memorial Hospital (03)
Tharp, Donald W.....402 W. Jackson St. (05)
Tomlin, Hugh M.....420 W. Washington St. (05)
Vlaskamp, Elaine.....500 W. Charles St. (05)
Voss, Gert.....420 W. Washington St. (05)
Walker, Jack M.....412 White River Blvd. (03)
Ware, Herbert E.....2200 Janney Ave. (04)
Wince, Leland L.....806 W. Jackson St. (05)
Wiza, Edward J., Jr....Ball State University (06)
Young, Gerald S.....924 W. Main St. (05)

Hinchman, Jean F.....Parker (47368)
Hill, Robert E.....Yorktown (47396)
Moss, Mavor J.....Yorktown (47396)

Bartley, Stan L.
2171 O'Hare Dr., Glenview, Ill. (60025)
Hull, Joel I.
U.S.S. Guam, LPH 9, F.P.O., N.Y., N.Y. (09501)
Leipold, Jon D.
5332 Piney Branch Circle, Norfolk, Va. (23502)

Weybright, William L.
Mission Hospital, Dahanu Rd., Thana District, Maharashtra State, India

DUBOIS COUNTY

Barrow, John H.....Dale (47523)
Backer, Henry G.....Ferdinand (47532)
Bland, Jack D.....Holland (47541)
Leon, Mario.....Holland (47541)

Huntingburg

(*Zip Code* 47542)

Bretz, John M.....302 Fourth St.
Craig, Harry L.....409 Van Buren
Erhart, Herbert G.....521 Fourth St.
Scales, Alfred B.....407 Van Buren
Scales, Allen D.....409 Van Buren
Stork, Harvey K.....530 Fourth St.

Jasper

(*Zip Code* 47546)

Beaven, John B.....111 Central Bldg.
Benages, Anthony.....948 MacArthur St.
Gootee, Francis H.....501 Clay St.
Gootee, Thomas H.....501 Clay St.
Heck, Martin C.....801 Newton
Held, George A.....716 W. Ninth St.
Klamer, Charles H.....715 MacArthur St.
Lukemeyer, St. John.....109 W. 12th St.
Ploetner, Edward J.....201 W. Sixth St.
Salb, John P.....106 Metzger Bldg.
Salb, Leo A. (S).....301 E. Sixth St.
Wagner, Arthur L.....115 E. Ninth St.

ELKHART COUNTY

Horswell, Richard G.....Bristol (46507)
Neidballa, Edward G.....Bristol (46507)

Elkhart

(*Zip Code* 46514)

Arlook, Theodore D.....912 W. Franklin St.
Atwood, William H.....405 S. Second St.
Bender, Robert L.....411 S. Third St.
Benson, James E.....405 S. Second St.
Billings, Elmer R.....405 S. Second St.
Bloom, George R.....506 S. Second St.
Boling, Richard C.....214 W. Marion St.
Bowdoin, George E. (S).....515 S. Second St.
Campbell, Patrick B.....605 Oakland Ave.
Classen, Pete R. C.....4112 S. Main St.
Compton, Walter A.....2225 Greenleaf Blvd.
Conklin, Raymond L. (S)....Ames Company, Inc.
Cormican, Herbert L.....1400 Hudson St.
Dovey, Edward G.....513 Oakland Ave.
Durham, Thomas E.....405 S. Second St.
Echeverria, Rodolfo E.....405 S. Second St.
Elliott, Thomas A.....405 S. Second St.
Fear, Olan D.....405 S. Second St.
Finfrock, James D.....515 S. Second St.
Futterknecht, James O.....405 S. Second St.
Gattman, George B.....405 S. Second St.
Graber, Virgil R.....1400 Hudson St.
Gray, Edwin H.....518 W. Franklin St.
Gray, Mary Case.....518 W. Franklin St.
Hannah, Jack W.....1906 E. Jackson Blvd.
Heiser, Ervin W.....1400 Hudson St.
Heminway, Norman L...1700 Rainbow Bend Blvd.
Hurley, James W.....405 S. Second St.
Ivy, John H.....405 S. Second St.
Jones, Robert B.....1528 W. Franklin
Keating, John U.....224 W. High St.
Kesim, Mufit H.....317 W. Lusher Ave.
Kielton, Melvyn J.....319 W. Lusher Ave.
Kintner, Burton E.....506 S. Second St.
Kistner, Arthur W.....400 Equity Bldg.
Klassen, Otto D.....2600 Oakland Ave.
Koehler, Elmer G.....416 W. Lexington Ave.
Lundt, Milo O.....521 S. Second St.
Luther, William C.....Ames Company, Inc.
McArt, Bruce A.....221 W. Jefferson
Mark, George A.....814 W. Marion St.
Martin, Charles F.....Ames Company, Inc.
Martin, Paul H.....313 N. Second St.
Michols, Raymond M.....405 S. Second St.
Middleton, Ramona J.....1400 Hudson St.
Miller, Galen R.....403 S. Ninth St.
Miller, Hugh A., Jr.....1127 Myrtle St.
Miller, Samuel T. (S).....506 S. Second St.
Mininger, Edward P.....1400 Hudson St.
Mishkin, Irving.....209 S. Second St.
Paff, William A.....115 S. Third St.
Paine, George E.....329 Meisner Ave.
Pancost, Vernon K.....1000 W. Marion St.
Parshall, Dale B.....3528 Gordon Rd.
Pletcher, William D.....405 S. Second St.
Rouen, Robert L.....1209 Harrison St.
Rupe, Lloyd O.....211 S. Fifth St.
Rupel, Dennis F.....2600 Oakland Ave.
Scheer, Alexander L.....405 S. Second St.
Schlosser, Herbert C. (S).....116 W. Marion St.
Sears, Murray M. (S).....304 Equity Bldg.
Spray, Page E.....320 W. High St.
Stubbins, William M.....1006 W. Franklin St.
Swank, Lucretia R.....1600 E. Jackson Blvd.
Swihart, Danny D.....506 S. Second St.
Swihart, Homer R.....1200 W. Marion St.
Whitlock, Coleman M., Jr.....Ames Company, Inc.
Wilson, Orley E.....217 N. Main St.
Yoder, C. Richard.....603 Oakland Ave.
Zeitler, Philip S.....1400 Hudson St.

Goshen

(*Zip Code* 46526)

Bender, John M.....112 W. High Park Ave.
Bigler, Frederick W.....314 S. Fifth St.
Bowser, Philip G.....107 S. Fifth St.
Chandler, Leon H.....112 E. Lincoln Ave.
Gunderson, Shaun D.....Goshen General Hospital
Haney, Leslie E.....112 S. Fifth St.
Harris, Neil R.....307 S. Seventh St
Hostetler, Carl M.....304 E. Lincoln Ave.
Kennedy, Myron S.....314 S. Fifth St.

Martin, Floyd S.....127 E. Lincoln St.
Minter, Donald L.....110 W. High Park Ave.
Quilty, Thomas J.....112 E. Madison St.
Simmons, Lloyd H. (S).....606 S. Third St.
Smucker, Ernest E.....112 S. Fifth St.
Troyer, Dana O.....201 E. Clinton St.
Troyer, George W.....110 W. High Park Ave.
Turner, John P.....115 E. Washington St.
Wagner, David G.....307 S. Seventh St.
Westfall, George S.....214 E. Lincoln Ave.

Gill, Dee D.....Leesburg (46538)
Teters, Melvin S. (S).....Middlebury (46540)
Yoder, Carl J.....Middlebury (46540)
Yoder, Jonathan G.....Middlebury (46540)
Rheinheimer, Floyd L.....Milford (46542)
Massanari, Walter S.....Millersburg (46543)

Nappanee

(*Zip Code* 46550)

Graber, Alvin R.....357 N. Nappanee St.
Kendall, Forest M.....219 W. Market St.
Price, Douglas W.....162 E. Market St.
Roose, Lisle W.....357 N. Nappanee St.
Wenger, James E.....357 N. Nappanee St.

DeFries, John J.....New Paris (46553)
Gorham, Charles E.....New Paris (46553)

Clark, Jack P.....303 S. Hunnington, Syracuse (46567)
Craig, Robert A.....P. O. Box 607, Syracuse (46567)
Fosbrink, Ephraim L...107 E. Main St., Syracuse (46567)
Zimmerman, William H.....R. R. No. 2, Syracuse (46567)

Guttman, John B.....Wakarusa (46573)
Miller, James.....Wakarusa (46573)

Todd, David D. (S)
5835 Beaumont Ave., La Jolla, Calif. (92037)

FAYETTE-FRANKLIN COUNTIES

Brookville

(*Zip Code* 47012)

Peters, Elmer E.....830 Main St.
Seal, Perry F.....901 Main St.
Smith, Herbert N.....812 Main St.

Connersville

(*Zip Code* 47331)

Ellis, George M.....108 E. 10th St.
Gregg, Albert F.....124 E. Sixth St.
Hudson, Arlington M.....321 W. 20th St.
Janes, R. Grant.....R. R. #2
Kerrigan, William F.....707 W. Third St.
Lockhart, Jack M.....707 W. Third St.
Mountain, Francis B.....930 Central Ave.
Neukamp, Frank H.....707 W. Third St.
Sanders, Bertram W.....634 Eastern Ave.
Steinem, Joseph L.....812 Grand Ave.
Waltz, Frank C.....10 Remedial Bldg.
Watterson, Gerald T.....1910 Virginia Ave.
Winklepleck, A. M.....R. R. #6

FLOYD COUNTY

Allen, George S.....Georgetown (47122)
Boha, Rudolf L.....Borden (47106)
Higgins, John R.....Floyds Knobs (47119)
Sloan, Herbert P....Lincoln Heights, Jeffersonville (47130)

New Albany

(*Zip Code* 47150)

Baker, Avey M. (S).....811 E. Spring St.
Baxter, Samuel M. (S).....1201 E. Spring St.
Bickers, Everett E.....3541 Paoli Pike
Brown, Kenneth H.....410 E. Spring St.
Buchman, Marshall H.....1824 State St.
Cannon, Daniel H.....1203 E. Spring St.
Cook, Melvin D.....P. O. Box 636
Edwards, William F.....604 E. Spring St.
Garner, William H., Jr.....919 E. Spring St.
Garner, William H., Sr. (S).....919 E. Spring St.
Gentile, John P.....101 Adams St.
Hess, Paul P.....Floyd Co. Bank Bldg.
Johnson, William V.....1850 State St.
LaFollette, Donald R.....1000 E. Spring St.
LaFollette, Robert E.....1000 E. Spring St.
McCullough, James Y.....700 E. Spring St.
Nedelkoff, Bogdan.....R. R. 2, Box 500H
Paris, John M.....602 E. Spring St.
Perdomo, Octavio J.....Silvercrest Hospital
Pierce, Gene S.....1696 Garretson Lane
Receveur, Robert.....2626 Charlestown Rd.
Robertson, Addis N. (S).....820 E. Spring St.
Robinson, Nan.....1726 State St.
Ruoff, William F.....1109 Lafayette Dr.
Shelton, Clyde F.....1726 State St.
Sonne, Irvin H., Jr.....1850 State St.
Streepey, Jefferson I.....1102 E. Spring St.
Tyler, Frank T. (S).....Hausfeldt Lane
Voyles, Harry E.....213 Elsby Bldg.
Wallace, Elmer L.....1919 State St.
Wolfe, Morton F.....2533 Glenwood Ct.
Wolfe, Nelson A.....1117 E. Spring St.
Worley, Henry L.....601 E. Spring St.
Youngs, Paul E.....2652 Charlestown Rd.

Byrn, Howard W. (S).....Oxford (47971)

FOUNTAIN-WARREN COUNTIES

Attica

(*Zip Code* 47918)

Fisher, John E.....217 S. Perry St.
Maris, Lee J.....201 Brady St.
Petrich, Peter R.....401 S. Perry St.
Raymundo, Vivencio F.....401 S. Perry St.

Covington

(*Zip Code* 47932)

Hoffman, Max N.....416 Union St.
Humphrey, Edward M.....Olin Mathieson Corp.
Stephens, Lowell R.....600 E. Liberty St.
Suzuki, Tsutomu T.....505 Washington St.

Furr, Jack D.....Kingman (47952)
Smith, Byron J.....Kingman (47952)
Person, Theodore C.....Veedersburg (47987)
Rusk, Hubert M.....Wallace (47988)
Nelson, Carl A.....West Lebanon (47991)
Ringer, William A.....Williamsport (47993)

FULTON COUNTY

Herrick, Charles L.....Akron (46910)
Miller, Virgil C.....Akron (46910)
Kelsey, Lawrence E.....Kewanna (46939)
Kraning, Kenneth K.....Kewanna (46939)

Rochester
(*Zip Code* 46975)

Herendeen, Elbie V.....120 W. Ninth St.
Knochel, Wayne L.....819 E. Ninth St.
Richardson, Joseph D.....121 W. Eighth St.
Rowe, Howard H.....720 Jefferson St.
Stinson, Dean K.....816 Main St.
Stone, Grant C.....819 E. Ninth St.

GIBSON COUNTY

Geick, Raymond G.....Fort Branch (47533)
Marchand, Edwin V.....Haubstadt (47539)
Petitjean, Harold G.....Haubstadt (47539)
Dye, William E.....Oakland City (47560)

Princeton
(*Zip Code* 47570)

Folck, John K.....115 N. Prince St.
Graves, Orville M. (S).....116 S. Hart St.
Lindauer, David H.....115 N. Prince St.
McCarty, Virgil.....113 S. Main St.
McElroy, Robert S.....116 S. Main St.
Noveroske, Richard J.....Gibson General Hospital
Peck, James F.....302 N. Prince St.
Weitzel, Roland E.....114 S. Hart St.
Wells, William R.....109 E. State St.

GRANT COUNTY

Shrock, Ethan E.....Amboy (46911)
Malott, Fred R.....Converse (46919)
Breedlove, C. Dane.....Fairmount (46928)
Yale, Charles A.....Fairmount (46928)
Garrison, Leon J..... 114 S. First St., Gas City (46933)
Koontz, William A.....126 E. Main St., Gas City (46933)
Shoemaker, Richard L...604 N. Third St., Gas City (46933)
Baskett, Russell J.....Jonesboro (46938)

Marion
(*Zip Code* 46952)

Abell, Charles F.....500 Wabash Ave.
Alderfer, Henry H.....131 N. Washington St.
Ansbacher, Stefan (H).....P.O. Box 149
Ayres, Wendell W.....500 Wabash Ave.
Bailey, Douglas A.....1251 Kem Rd.
Bloom, Asa W.....724 W. Third St.
Boyer, Grace M. B.....605 Locust St.
Brown, Robert M....520 Marion Nat'l Bank Bldg.
Comeau, William J.....Marion General Hosp.
Cunningham, Robert D.....500 Wabash Ave.
Custer, Norman L.....131 N. Washington St.
Davis, Joseph B.....131 N. Washington St.
Davis, Merrill S. (S).....131 N. Washington St.
Donaldson, Miles W.....2927 S. Washington St.
Dunbar, Fred E.....1251 Kem Rd.
Fisher, Henry.....1502 S. Washington St.
Fisher, Pierre J., Jr.....500 Wabash Ave.
Fuelling, James L.....131 N. Washington St.
Ganz, Max.....1251 Kem Rd.
Goldsmith, David A.....2711 River Rd.
Grant, M. Arthur.....P. O. Box 1088
Harnden, Hurlbut L.....131 N. Washington St.
Hummel, Russel M.....500 Wabash Ave.
Jarrett, John C.....131 N. Washington St.
Jones, Milton F.....131 N. Washington St.
Kershner, Charles R.....500 Wabash Ave.
Lahr, Richard E.....1121 W. Third St.
Larzelere, Henry B.....131 N. Washington St.
Lavengood, Russell W.....225 Glass Block
Long, Max R.....803 S. Boots St.
Lonngren, Dudley H.....131 N. Washington St.
Love, V. Logan.....131 N. Washington St.
McKeever, Joseph W.....131 N. Washington St.
Miller, H. Allison.....320 Glass Block
Munoz, Jose C.....131 N. Washington St.
Musselman, Lawrence K.....500 Wabash Ave.
Pattison, John D.....131 N. Washington St.
Pearcy, Marcene.....500 Wabash Ave.
Powell, J. Paxton.....500 Wabash Ave.
Reid, James D.....500 Wabash Ave.
Renbarger, Lester L.....1531 W. Second
Rhamy, Arthur P.....500 Wabash Ave.
Rhamy, Donald E.....500 Wabash Ave.
Rhorer, John G.....500 Wabash Ave.
Richardson, Joseph H.....131 N. Washington St.
Simmons, Frederick H.....1009 N. Baldwin
Skomp, Claud E.....500 Wabash Ave.
Smith, Barton T.....131 N. Washington St.
Snowhite, Arthur B.....500 Wabash Ave.
Thompson, B. Jay.....Marion General Hosp.
Walton, R. Lee.....131 N. Washington St.
Warren, Carroll B.....511 Glass Block
Watkins, James K.....131 N. Washington St.
Weinberg, Samuel.....104 W. Third St.
Wilson, Ned A.....317 N. Western Ave.
Wojcik, Ladislas D.....131 N. Washington St.
Woodbury, John W.....131 N. Washington St.
Young, Robert G.....1207 Northwood Ct.

Beck, Thomas A.....Swayzee (46986)
Taylor, Everett C.....Upland (46989)
Rifner, Eugene S.....Van Buren (46991)

GREENE COUNTY

Bloomfield
(*Zip Code* 47424)

Graf, Jerome A.....227 W. Mechanic St.
Mount, Mathias S.....55 N. Franklin St.
Turner, Harold B. (S).....126 E. Indiana Ave.

Jasonville
(*Zip Code* 47438)

Porter, Carl M.....124 Cook St.
Rotman, Harry G.....111½ E. Main St.
Rotman, Sam I.....P. O. 127

Linton
(*Zip Code* 47441)

Bailey, Edwin B.....129 E. Vincennes
Broshears, Kenneth P.....129 E. Vincennes
Raney, Ben B.....129 E. Vincennes
Tomak, Milton E.....289 N. Main St.
Woner, John W.....Linton

Moses, George E. (S).....Worthington (47471)
Moses, Robert E.....Worthington (47471)

HAMILTON COUNTY

Donahue, Claude M.....Carmel (46032)
Thomas, W. Clayton.....Carmel (46032)
Havens, Oscar.....Cicero (46034)
Ayers, Marion E.....10447 College Ave., Indianapolis (46280)

Noblesville

(*Zip Code* 46060)

Ambrose, Jesse C.....298 N. Ninth St.
Blackburn, Howard R.....Riverview Hospital
Carter, Eunice M.....1084 Clinton St.
Harris, Robert F.....120 N. Ninth St.
Hash, John S.....110 Lakeview
Haywood, John G.....120 N. 11th St.
Lanning, R. Adrian.....10th and North Dr.
Lloyd, Joe R.....107 John St.
Shanks, Ray W.....1507 Logan St.

Griffith, James W. (S).....Sheridan (46069)
Manhart, Doyle B.....Sheridan (46069)
Newby, Eugene.....Sheridan (46069)
Waitt, Paul.....Sheridan (46069)
Connoy, Leo F.....Westfield (46074)

HANCOCK COUNTY

Scott, Robert O.....Charlottesville (46117)
Garrison, James L.....Cumberland (46229)
Navin, Hugh K.....Fortville (46040)
Rhynearson, Hal R.....Fortville (46040)

Greenfield

(*Zip Code* 46140)

Anderson, James T.....114 N. State St.
Beeson, Wilbur P.....1001 N. State St.
Endicott, Wayne H. ..... 10 W. Boyd St.
Farrell, John J., Jr.....1001 N. State St.
Henn, R. Anthony.....211 W. Main St.
Hunter, Donn R.....10 W. Boyd St.
Kinneman, Robert E.....1038 N. State St.
Kirby, Ted C.....1001 N. State St.
Pareja, Frank S.....18 Allen Lane
Rea, Ralph L.....114 N. State St.
Singco, Bienvenido O.....744 N. State St.
Smith, John H.....144 Grandison Rd.
Vingis, Bronie A.....746 N. State St.

Cagle, Bob R.....New Palestine (46163)
Pierson, Thomas A.....New Palestine (46163)
Miller, Joseph A.....Oaklandon (46236)
Moenning, John E.....Oaklandon (46236)
Kuhn, Robert W.....Wilkinson (46186)

HARRISON-CRAWFORD COUNTIES

Corydon

(*Zip Code* 47112)

Blessinger, Louis H.....101 W. Chestnut St.
Brockman, Wilfred J.....439 E. Chestnut
Dillman, Carl E.....Beaver & Oak Sts.
Dukes, David J.....439 E. Chestnut St.
Jordan, Richard A.....Harrison Dr.
Martin, Samuel W.....R.R. 1

Baker, Guy D. (S).....Crandall (47114)
May, R. Milton.....Laconia (47135)
Seipel, Stanley.....Lanesville (47136)
Benz, Jesse C. (S).....Marengo (47140)

HENDRICKS COUNTY

Brownsburg

(*Zip Code* 46112)

Black, M. James.....702 E. Main St.
Foltz, Lloyd E.....20 W. Main St.
Scudder, Arthur N.....24 N. Grant St.
Walker, Thomas M.....702 E. Main St.

Danville

(*Zip Code* 46122)

Cheesman, Donald D.....637 E. Main St.
Heinlein, Carl L.....637 E. Main St.
Kerlin, Joseph C.....637 E. Main St.
Kirtley, Robert W.....138 W. Marion St.
Koch, Elmer L.....201 E. Columbia St.
Terry, Lloyd S.....138 W. Marion St.

Calhoon, John P.
Avon, Box 300C, R. R. 8, Indianapolis (46231)
Coats, Eli A.
Avon, Box 300C, R. R. 8, Indianapolis (46231)
Ellis, Lyman H.....Lizton (46149)
Gibbs, Joseph W.
Home Lawn Sanitarium, Martinsville (46151)
Scamahorn, Malcolm O.....Pittsboro (46167)

Plainfield

(*Zip Code* 46168)

Aiken, Milo M.....140 N. Center St.
Cohen, Irving.....645 E. Main St.
Haggard, David B.....P. O. Box 191
Stafford, William C.....P.O. Box 97
Warbinton, Fred P.....P. O. Box 337

HENRY COUNTY

Donahue, Francis E.....Dublin (47335)
Hollenberg, Alfred E.
700 N. Washington St., Hagerstown (47346)
Miller, William A..99 S. Washington, Hagerstown (47346)
Wiatt, Leonard H.....Knightstown (46148)
Stauffer, George E.....Mooreland (47360)

New Castle

(*Zip Code* 47362)

Amos, Robert L.....540 S. Main St.
Bledsoe, James G.....319 S. 14th St.
Brock, Joseph T.....New Castle State Hosp.
Burnett, Arthur B.....106 N. Main St.
Cain, David R.....1912 Bundy Ave.
Campbell, Sam W.....901 McCormack Dr.
Dye, Cloyd L.....1007 N. 16th St.
Easter, James N.....1912 Bundy Ave.
Fisher, John E.....540 S. Main St.
Foster, Ray T.....420 N. Main St.
Grant, Phyllis A.....3007 S. 14th St.
Harrison, Benjamin L.....540 S. Main St.
Heilman, William C., Jr.....1007 N. 16th St.

Heilman, William C. (S).....1007 N. 16th St.
Hill, Kenneth G.....530 S. Main St.
Iterman, George E. (S).....1007 N. 16th St.
Kennedy, Walter U. (S).....208 Union Block
KinKade, Paul T.....1015 Broad St.
Life, Homer L.....1015 Broad St.
May, A. J.....319 S. 14th St.
McDonald, Frank C.....365 Parkside Dr.
McElroy, James S.....1007 N. 16th St.
McKee, Roy G.....606 N. Fair Oaks Dr.
Morec, George J.....1007 N. 16th St.
Murray, William E.....New Castle State Hosp.
Reed, Donald W.....New Castle State Hosp.
Saint, William K.....540-B S. Main St.
Smith, Mark E.....1007 N. 16th St.
Steussy, Calvin N.....Henry Co. Hospital
Stricker, Paul J.....319 S. 14th St.
Vivian, Donald E.....Henry County Hospital
White, Gordon O.....New Castle State Hosp.
Wilhelm, Guido P.....1007 N. 16th St.

Robertson, William S.....Spiceland (47385)

HOWARD COUNTY

Denton, Larkin D.....Greentown (46936)

Kokomo

(*Zip Code* 46901)

Althoff, William R.....Chrysler Corporation
Alward, John H.....321 W. Walnut St.
Artis, Myrle E.....519½ N. Main St.
Ault, Carl H.....502 S. Berkley Rd.
Bowers, Copeland C.....210 W. Mulberry St.
Bowers, Garvey B.....210 W. Mulberry St.
Bowers, John A.....210 W. Mulberry St.
Bradley, Richard V.....3421 S. Lafountain
Brown, Richard J.....404 S. Berkley Rd.
Bruegge, Theodore J.....315 S. Berkley Rd.
Cattell, Lee M.....402 S. Berkley Rd.
Conley, Thomas M.....500 Southway Blvd., East
Craig, Reuben A. (S).....514 W. Superior St.
Craig, Reuben.....514 W. Superior St.
Crawford, Theodore R.....2114 W. Sycamore St.
Das, Amal K.....401 E. Reynolds Dr.
Doss, Jerome F.....3520 S. Lafountain
Earl, Max M.....502 S. Berkley Rd.
Elleman, John H.....416 W. Mulberry St.
Ericson, Homer S.....107 S. Dixon Rd.
Fields, Donald L.....3520 S. Lafountain
Frazier, John L.....3421 S. Lafountain
Fretz, Richard C.....2008 W. Sycamore St.
Golper, Marvin N.....1907 W. Sycamore St.
Good, Richard P.....400 S. Berkley Rd.
Grothouse, Carl B.....402 S. Berkley Rd.
Guin, Jere D.....406 S. Berkley Rd.
Halfast, Richard W.....402 S. Berkley Rd.
Harshman, James A.....St. Joseph Hospital
Harvey, Emerson C., Jr...Delco Radio Division
Higgins, Jack W.....400 S. Berkley Rd.
Hoyt, John M.....3501 Hawthorne Lane
Hutto, William H.....215 W. Superior St.
Jewell, George M....610 Armstrong-Landon Bldg.
Kremers, George A.....404 S. Berkley Rd.
Longshore, Robert E.....2016 W. Sycamore St.
McClure, Warren N.....319 S. Berkley Rd.
McIndoo, Ralph E. (S).....313 W. Taylor St.
Mendelson, Stanley M.....401 E. Reynolds Dr.
Moore, John M.....3520 S. Lafountain
Morrison, William R. (S)..504 Union Bank Bldg.
Murray, Ernest C.....408 W. Mulberry St.
Paris, Durward W...614 Armstrong-Landon Bldg.
Perkins, Powell L.....317 S. Berkley Rd.
Phares, Robert W.....1712 S. Malfalfa Rd.
Prather, Philip E.....909 S. Courtland
Quakenbush, John.....3421 S. Lafountain
Radpour, Shokri.....2004 W. Sycamore
Ramey, John W. (S).....107½ S. Union St.
Rinehart, James J.....401 E. Reynolds Dr.
Rudicel, Max.....1907 W. Sycamore St.
Schwartz, Frederick C.....2016 W. Sycamore
Sekulich, Milo.....St. Joseph Hospital
Smith, Charles F.....Howard Community Hosp.
Smith, Gloster J.....102½ S. Main St.
Spangler, Jesse S.....215 E. Taylor St.
Tate, James.....3520 S. Lafountain
Tofaute, John L.....402 S. Berkley Rd.
Trimble, John G.....116 S. Buckeye St.
Van Denbark, Howard M.....3520 S. Lafountain
Wachob, Tom W., Jr.....3520 S. Lafountain
Wilson, Norman K.....3421 S. Lafountain

Walton, F. Richard.....116 W. Ninth, Rochester (46975)
Ware, John R.....Russiaville (46979)

HUNTINGTON COUNTY

(*Zip Code* 46750)

Huntington

Brubaker, Harold S.....42 W. Park Dr.
Casey, Stanley M. (S).....408 E. Market St.
Clunie, William A.....323 W. Park Dr.
Cope, Stanton E.....1022 N. Jefferson St.
Doermann, Paul E.....340 E. Market St.
Erehart, Mark G. (S)..Maple Grove Rd., R. R. 8
Eviston, John B. (S).....34 E. Washington St.
Gill, D. Richard.....1751 N. Jefferson St.
James, Thomas, Jr.....202 U. B. Publishing Bldg.
Johnston, Robert G. (S).....339 E. Market St.
Marks, Howard H.....248 W. Park Dr.
Meiser, Robert D.....612 N. Jefferson St.
Miller, Wayne S.....610 N. Jefferson St.
Peare, Reeve B.....1751 N. Jefferson St.
Van Campen, Warren M.....3 Park Moor Dr.
Wagner, Richard.....1355 Guilford
Wheeler, Barth E.....818 W. Park Dr.

Cooper, B. Trent.....Roanoke (46783)
Bennett, J. B.....Warren (46792)
McLaughlin, James R.....Warren (46792)
Ray, Carl S.....Warren (46792)

JACKSON-JENNINGS COUNTIES

Gillespie, Garland R.....Brownstown (47220)
Shields, Jack E.....Brownstown (47220)
Guthrie, William H.
Muscatatuck State School, Butlerville (47223)
Knotts, Slater.....R. R. 3, Columbus (47201)
Adair, William K. (S)
115 Armstrong, Crothersville (47229)
Bard, Frank B...305 E. Howard St., Crothersville (47229)
Butler, Joe B.....508 E. Moore St., Crothersville (47229)
Scharbrough, William D.....Ewing (47233)
Templeton, Ian S.
7825 N. Sherman Dr., Indianapolis (46240)

North Vernon

(*Zip Code* 47265)

Berkshire, Shaffer B.....241 Norris Ave.
Calli, Louis J.....408 S. State St.
Ellis, Forrest D.....241 Norris Ave.
Johnson, William A.....245 Norris Ave.
Thayer, Benet W.....20 Jackson St.

Seymour

(*Zip Code* 47274)

Baxter, Harry R.....326 N. Walnut St.
Black, Joe M.....502 W. Second St.
Blaisdell, William F.....207 N. Pine St.
Bobb, Kenneth E.....410 S. Chestnut St.
Bosch, Ralph.....635 W. Second St.
Day, William D. C.....410 S. Chestnut St.
Graessle, Harold P. (S).....304 W. Second St.
Linson, John C.....410 S. Chestnut St.
Miller, Harold E.....303 S. Walnut St.
Ripley, John W..... 321 Bruce St.
Wiethoff, Clifford A.....214 N. Walnut St.

JASPER COUNTY

Schantz, Richard.....Remington (47977)

Rensselaer

(*Zip Code* 47978)

Beaver, Ernest R.....111 Thompson St.
Greenberg, Harry L.....Box 244
Greene, Robert W.....116 N. Cullen
O'Brien, Francis E. McKinley and Washington Sts.
Ockermann, Kenneth R.....119 W. Harrison St.
Williams, Paul A.....119 W. Harrison St.

JAY COUNTY

Dunkirk

(*Zip Code* 47336)

Entner, Charles L.....226 S. Meridian St.
Shroyer, Herbert L.....244½ S. Main St.
Tate, Elizabeth..... 317 S. Main St.

Andrews, C. Franklin.....R. R. 1, Geneva (46740)
Rudolph, Rosser A...325 Main St., Geneva (46740)

Portland

(*Zip Code* 47371)

Cripe, William H. .....302 N. Meridian St.
Donnally, George A.....Jay County Hospital
Fitzpatrick, James S.....603 W. Arch St.
Gillum, Eugene M.....522 W. Arch St.
Keeling, Forrest E.....504 W. Arch St.
Lopez, Alfonso.....16 Weiler Bldg.
Lyon, Florence M.....127 E. North St.
Schenck, Ralph E.....603 W. Arch St.
Spahr, Donald E.....615 W. Race St.
Steffy, Ralph M.....504 W. Arch St.
Vormohr, Joseph F.....604 W. Arch St.

JEFFERSON-SWITZERLAND COUNTIES

Morris, Edward D., Jr.....Deputy (47230)

Madison

(*Zip Code* 47250)

Alcorn, Merritt O.....R. R. 2
Bryan, Paul E.....Madison State Hospital
Burcham, James B.....Madison State Hospital
Childs, Wallace E.....112 Presbyterian Ave.
Fong, Theodore C. C.....Madison State Hospital
Haney, William K...P. O. Box 846, Madison Station
Hare, Francis W., Jr.....722 W. Main St.
Harris, George F.....445 Clifty Dr.
Heaton, Elton.....King's Daughters' Hospital
Jackson, Howard C.....104 E. Third St.
Johnson, Robert D.....722 W. Main St.
McAtee, Ott B.....Madison State Hospital
Modisett, Jackson W.....722 W. Main St.
Modisett, Marcella S.....722 W. Main St.
Petway, Allen P.....Jefferson Proving Ground
Pratt, Ralph M., Jr.....323 Poplar St.
Riley, Henry S.....722 W. Main St.
Shuck, William A.....Odd Fellows Bldg.
Sloan, W. Keith.....426 E. Main St.
Turner, Anna Goss.....602 E. Second St.
Zink, Robert O.....722 W. Main St.

Graves, Noel S.....Vevay (47043)

JOHNSON COUNTY

Deogracias, Francisco D.
R. R. 1, Edinburg (46124)
MacQuigg, David E.
P. O. Box 305, Edinburg (46124)

Franklin

(*Zip Code* 46131)

Andrews, Hugh K.....1035 W. Jefferson St.
Bullers, Robert C.....395 S. Home Ave.
Chappel, Alfred T.....100 N. Main St.
Deppe, Charles F.....301 E. Jefferson St.
Ferrara, Joseph F.....1107 N. Main St.
Foster, Robert H. K.....301 E. Jefferson St.
Hibbs, William G.....Masonic Hospital
Jones, Charles A.....251 E. Jefferson St.
Mock, Harry E., Jr.....901 N. Main St.
Province, William D.....100 N. Main St.
Records, Arthur W.....198 E. Jefferson St.
Records, John M.....198½ E. Jefferson St.
Reynolds, Paul.....1035 W. Jefferson St.
Ritteman, George W..Johnson Co. Memorial Hosp.
Roller, Mac C.....1551 N. Main St.
Stogsdill, Willis W.....R. R. 4
Walters, Jack L.....1551 N. Main St.
Waymire, William M.....21 S. Dawn Dr.
Wesemann, Merrill M.....251 E. Jefferson St.

Greenwood

(*Zip Code* 46142)

Barnes, Helen Beall.....360 S. Madison Ave.
Brown, George E.....374 S. Madison Ave.
Link, Charles W., Jr.....365 E. Main St.
Machledt, John H.....243 S. Madison Ave.
Ogle, Robert W.....360 S. Madison Ave.
Sheek, Kenneth I.....360 S. Madison Ave.
Tiley, George A.....41 N. Madison Ave.
Young, Joseph W.....365 E. Main St.

Bullington, George E.....Whiteland (46184)

KNOX COUNTY

(*Zip Code* 47512)

Bicknell

Byrne, Robert J.....207 N. Main St.

Springstun, George H. (S).....Oaktown (47561)

Vincennes

(*Zip Code* 47591)

Anderson, John B.....30 N. Third St.
Anderson, Richard M.....30 N. Third St.
Arbogast, Paul B.....915 Main St.
Barrett, Thomas L.....307 S. Fifth St.
Bartlett, Donald T.....307 S. Fifth St.
Beckes, Ellsworth W.....220 N. Fifth St.
Black, Boyd K.....Good Samaritan Hospital
Cantwell, Edgar R.....202 Broadway St.
Chattin, Herbert O.....729 Main St.
Coffel, Melvin H.....214 Buntin St.
Curtner, Myron L. (S).....222 N. Sixth St.
Dayson, Louie O.....218 Security Bank Bldg.
Ewing, Nathaniel D.....719 Nicholas
Floyd, Malcolm S.....Good Samaritan Hospital
Haswell, John.....607 Dubois St.
Hendrix, Charles E.....603 Busseron St.

Humphreys, Joe E.....1516 N. Second St.
Jacqmain, Ralph J.....609 Dubois St.
McCormick, Hubert D. (S).....327 Busseron St.
McDowell, Mordecai M.....611 Dubois St.
Miller, Charles L.....301 American Bank Bldg.
Moore, Robert G.....21 N. Third St.
Murray, John S.....317 Security Bank Bldg.
Nichols, Robert J.....605 Busseron St.
Parmenter, Harry B.....301 American Bank Bldg.
Reilly, James F.....401 Buntin St.
Shaffer, Kenneth L.....302 Main St.
Shanklin, Jack L.....702 Vigo St.
Smith, Ralph O.....603 Busseron St.
Spencer, Frederic.....429 S. Sixth St.
Stein, Richard H.....301 American Bank Bldg.
Stewart, J. Frank W.....Hillcrest Hospital
Vaughn, Walter R.....615 Dubois St.
von der Lieth, William C.....14 N. Third St.
Welch, Norbert M.....615 Dubois St.

Combs, Daniel J.
165-A Hillcrest, DeRidder, La. (70634)
Hoffman, Doris (S)
268 Pebble Beach Dr., Goleta, Calif. (93017)
McMahan, Virgil C.....7 LaDoga Ave.,
Danis Island, Tampa, Fla. (33606)

KOSCIUSKO COUNTY

Urschel, Dan L.....Mentone (46539)
Wilson, Wymond B.....Mentone (46539)
Hogle, Frank D.....North Webster (46555)
Pierson, Pearl H.....Silver Lake (46982)

Warsaw

(*Zip Code* 46580)

Arford, John E.....827 S. Union St.
Baum, John R.....212 S. Indiana
Brooks, Leonard C.....2022 E. Winona Ave.
Cron, William J.....827 S. Union St.
Dormire, Robert D.....827 S. Union St.
DuBois, Charles C. (S).....800 E. Center St.
Hashemi, Hossein.....602 S. Buffalo
Haymond, George.....600 E. Winona Ave.
Keough, Thomas F.....600 E. Winona Ave.
Moser, Arthur L.....600 E. Winona Ave.
Parke, William C.....600 E. Winona Ave.
Snider, Roland.....600 E. Winona Ave.
Thomas, Everett W.....212 S. Indiana

LAGRANGE COUNTY

Mattox, Dean L.....Howe (46746)
Taylor, M. Reed, Jr.....Howe (46746)
Yunker, Philip E.....Howe (46746)

LaGrange

(*Zip Code* 46761)

Flannigan, Harley F.....213 W. Lafayette
Mellinger, Michael O.....Medical Bldg.
Studebaker, Lloyd R.....300 N. Townline Rd.

Martin, Allen S.....Shipshewana (46565)
Lehman, Kenneth M.....Topeka (46571)
Williams, John H.
6711 Markwood, Worthington, Ohio (43085)

LAKE COUNTY

Cedar Lake

(*Zip Code* 46303)

Babcoke, Gary A.....R. R. 2, Box 337
King, Robert W.....R. R. 1, Box 6
Miller, Donald C.....R. R. 2, Box 337
Misch, William.....R. R. 2, Box 337
Steward, Paul W.....R. R. 2, Box 337

Crown Point

(*Zip Code* 46307)

Alvarez, Paul.....7745 Carolina Pl.
Birdzell, John P.....124 N. Main St.
Carpenter, Bennie F.....123 N. Court St.
Carroll, Mary E.....124 N. Main St.
Doherty, Raymond J.....47 W. 68th Place
DuSold, Donald D.....R. R. 1, Box 122
Fadul, Armand.....47 W. 68th Pl.
Gray, Daniel E.....182 W. North St.
Horst, William N.....123 N. Court St.
Mirich, Ernest C.....960 W. 66th Ave.
Monroe, F. Bruce.....40 West 73rd St.
Steele, Everett B.....318 S. East St.
Troutwine, William R.....224 S. Court
Wilson, Norman J....James Parramore Hospital

Lopez, Filemon P.....212 Joliet St., Dyer (46311)

East Chicago

(*Zip Code* 46312)

Barron, Elmer A.....3414 Michigan Ave.
Benchik, Frank A.....4712 Magoun Ave.
Boys, Fay F.....4712 Magoun Ave.
Braun, Benjamin D. ....St. Catherine's Hospital
Broomes, Edward L. C.....2402 Broadway
Bryant, Edward G.....2220 Broadway
Campagna, Ettor A.....3406 Guthrie St.
Dainko, Alfred J.....915 W. Chicago Ave.
del Bando, Juan N.....3210 Watling
Dunning, Preston M.....3210 Watling
Feinberg, Irwin.....1802 E. Columbus Dr.
Fleischer, Jacob C.....4035 Elm St.
Given, Gilbert Z.....3803 Main St.
Goldenberg, Mitchell E.....3701 Main St.
Govorchin, Alexander.....4614 Baring
Grosso, William G.....1919 E. Columbus Dr.
Hammer, Michael.....4035 Elm St.
Harper, James W.....3847 Euclid
Hayes, Jesse D.....4804 Alexander
Hernandez, I. C.....1802 Columbus Dr.
Jacobo, Miguel J.....1419 Carroll St.
Kmak, Chester J.....815 W. Chicago Ave.
Kopanko, Bernard F.....915 W. Chicago Ave.
Levin, Eli L. (S).....4105 Grand Blvd.
McGuire, Desmond F. (S)...3429 Michigan Ave.
Marks, Ora L.....815 W. Chicago Ave.
Marquinez, Adoracion A.....2102 Lituanica Ave.
Martirez, Napoleon A....4710 Indianapolis Blvd.
Milan, Shijachki D.....622 W. Chicago Ave.
Nicosia, John B.....1802 E. Columbus Dr.
Noe, Joseph T.....3210 Watling St.
Payne, Arthur C. (S).....2020 Broadway
Reitman, Paul H.....4321 Fir St.
Romero, Plinio.....3807 Main St.
Shulruff, Harry I.....3701 Main St.
Strom, Jack.....1820 E. Columbus Dr.
Teegarden, Joseph A., Jr...1919 E. Columbus Dr.
Teplinsky, Louis L.....1802 E. Columbus Dr.
Trepagnier, Francis B.....2108 Broadway
Walker, Adolph P.....1820 E. Columbus Dr.

Gary

(*Zip Code* 464 *plus zone number*).

Abramson, Allan L.....3290 Grant St. (08)
Agana, Adriano A.....5000 W. Ridge Rd. (08)
Alfano, Paul A.....2717 Wabash (04)
Almquist, Carl O. (S).....550 Lincoln (02)
Ambrozaitis, Kazys.....1600 W. Sixth Ave. (02)
Amico, Pasquale J.....6111 Harrison St. (08)
Angeles, Uldarico A.....504 Broadway (02)
Barros, Paul.....6111 Harrison St. (08)
Barton, Reginald R.....427 S. Lake (03)
Behn, Walter M. (S)....1514 W. Fifth Ave. (02)
Bendler, Carl H.....3290 Grant St. (08)
Bernard, Marvin R.....4431 Broadway (09)
Bills, R. James.....504 Broadway (02)
Bills, Robert N. (S).....504 Broadway (02)

Boone, Clarence W.....2200 Grant St. (04)
Bornstein, Herschel.....504 Broadway (02)
Brady, Samuel J.....504 Broadway (02)
Brandman, Harry.....504 Broadway (02)
Brincko, John.....504 Broadway (02)
Brink, Calvin C. (S)..411 W. Eighth Ave. (02)
Brown, Leo R.....3290 Grant St. (08)
Cahue, Antonio R.....504 Broadway (02)
Carberry, George A.....3656 Grant St. (08)
Carbone, Joseph A.....6111 Harrison St. (08)
Carey, J. Albert.....2964 W. 11th Ave. (04)
Carmody, Raymond F.....6111 Harrison St. (08)
Choslovsky, Sydney.....1600 W. Sixth Ave. (02)
Chube, David D.....1649 Broadway (07)
Cohen, Hyman.....1600 W. Sixth Ave. (02)
Cooper, Leo K.....504 Broadway (02)
Corrao, Gaetano.....2471 Colfax (06)
Daniel, Robert A.....738 Broadway (02)
Darling, Dorothy R.....807 Fayette (03)
De Bois, Elon.....1080 Roosevelt (04)
Dierolf, Edward J.....504 Broadway (02)
Disney, Charles T.....504 Broadway (02)
Doneff, Ronald H...5490 Broadway Plaza (08)
Duncan, John S.....2165 W. 11th Ave. (04)
English, Hubert M. (S)....673 Broadway (02)
Espy, Theodore R.....1901 Broadway (07)
Fadell, Matthew J.....6111 Harrison St. (08)
Foster, Douglas L.....475 Broadway (02)
Gallinatti, John J.....554 S. Lake (03)
Gehring, Thomas A.....6111 Harrison St. (08)
Gilles, Pierre.....2200 Grant St. (04)
Glover, William J.....6111 Harrison St. (08)
Goldberg, Harold B.....3656 Grant (08)
Golding, Robert F.....540 Tyler St. (02)
Goldstone, Adolph.....3229 Broadway (09)
Goldstone, Arthur.....3233 Broadway (09)
Goldstone, Joseph.....3229 Broadway (09)
Goldstone, Robert J.....3229 Broadway (09)
Goldstone, Sidney R.....3233 Broadway (09)
Goodwin, Thomas..3820 Central, East Gary (05)
Grant, Benjamin F.....1706 Broadway (07)
Gregoline, Amadeo F.....700 Arthur (04)
Gregoline, Eugene.....4655 Broadway (09)
Gutierrez, Peter E.....5490 Broadway (08)
Hadey, James H.....2620 W. Fifth Ave. (04)
Haith, John W.....1960 W. 11th St. (04)
Halley, Robert.....4655 Broadway (09)
Han, Daniel.....1600 W. Sixth Ave. (02)
Hicks, William K.....1600 W. Sixth Ave. (02)
Hodurski, Zigfield.....4319 Broadway (09)
Hoit, Leonard.....504 Broadway (02)
Holliday, Alfonso.....2200 Grant St. (04)
Irish, Wilbur J.....358 Johnson St. (02)
Jahns, Albin A.....2318 W. Fifth St. (04)
Johnson, Arnold L.....2200 Grant St. (04)
Johnson, Lonnie B. (S).....123 W. 21st St. (07)
Johnson, William H.....6111 Harrison St. (08)
Kaltenthaler, Albert....1600 W. Sixth Ave. (02)
Kamen, Jack M.....540 Tyler St. (02)
Kendrick, Frank J.....504 Broadway (02)
Khaton, Odessa M.....1649 Broadway (07)
Kobrin, Meyer W.....3229 Broadway (09)
Kolettis, John G.....6111 Harrison St. (07)
Kopcha, Joseph E.....504 Broadway (02)
Korn, Jerome M.....3290 Grant St. (08)
Leahey, J. H.....554 S. Lake St. (03)
Lebioda, Henry S.....6111 Harrison St. (08)
Lewis, George N.....504 Broadway (02)
Lewis, Lucien A.....2200 Grant St. (04)
Lipschutz, Harold.....3290 Grant (08)
Lipsey, Alfred J.....3290 Grant (08)
Loh, Hwei-Ya (Chang)....212 Cleveland St. (04)
Loh, Wei-Ping.....212 Cleveland St. (04)
Lopez, Santiago A.....3807 Washington St. (08)
Lorenty, Thaddeus B.....504 Broadway (02)
Lovell, Martin H. (S).....124 W. 25th Ave. (02)
Lutz, Georgianna.....504 Broadway (02)
Lytwakiwsky, Anatol.....6101 Miller Ave. (03)
McDonald, Walter E.....1721 Broadway (07)
Manalo, Francisco S.....538 Lincoln (02)
Marcus, Morris C. (S).....3229 Broadway (09)
Marshall, Millard R.....1215 Vermillion St. (03)
Martino, Robert S.....2318 W. Fifth Ave. (04)
Mason, Earl.....540 Tyler St. (02)
Mather, J. Winford
2250 Ripley St., East Gary (05)
Mayorga, Alfredo.....3807 Washington (08)
Milos, Robert J.....504 Broadway (02)
Minczewski, Richard C.
5490 Broadway Plaza (08)
Mirro, John A.....6111 Harrison St. (08)
Mitchell, Georgia B.....1706 Broadway (07)
Molengraft, Cornelius J.....504 Broadway (02)
Morris, Hyman R.....3229 S. Broadway (09)
Moswin, Jack A.....504 Broadway (02)
Nelson, Walfred A.....559 S. Lake St. (03)
Oberlander, Seymour.....3290 Grant St. (08)
Olivo, Marciano T.....1600 W. Sixth Ave. (02)
Olson, Leslie D.....2318 W. Fifth Ave. (04)
Ornelas, Joseph P.....6111 Harrison St. (08)
Pappas, Eddie T.....2717 Wabash Ave. (04)
Parratt, Louis W.....708 Broadway (02)
Penn, Robert A.
3820 Central Ave., East Gary (05)
Pettis, Arthur G.....1600 W. Sixth Ave. (02)
Phillips, Donald M.....3000 W. 57th Ave. (08)
Pierson, Howard.....620 E. 10th Pl. (02)
Platis, James M.....504 Broadway (02)
Poracky, Bernard F.....504 Broadway (02)
Pruitt, Jacob E.....6111 Harrison St. (08)
Radigan, Leo R.....6111 Harrison St. (08)
Reynolds, James S.....504 Broadway (02)
Richter, Samuel.....504 Broadway (02)
Riordan, John F.....1600 W. Sixth Ave. (02)
Rizk, Mahfouz H.....6111 Harrison St. (08)
Robinson, Walter K.....6111 Harrison St. (08)
Rosenbloom, Philip J.....571 Lincoln St. (02)
Ross, David E., Jr.....633 E. 21st Ave. (07)
Roth, Leo.....3229 Broadway (09)
Roth, Melvin I.....3229 Broadway (09)
Rubin, Simon S.....504 Broadway (02)
Russo, Andrew E.....5490 Broadway (08)
Ryan, Hubert J.....5490 Broadway Plaza (08)
Saavedra, Bernardo.....4431 Broadway (09)
Sala, Joseph J.....2705 Wabash (04)
Sala, Walter R.....2705 Wabash (04)
Schulz, Kurt J.....4655 Broadway (09)
Scully, John T.....2318 W. Fifth Ave. (04)
Senese, Thomas J.....504 Broadway (02)
Shapiro, Seymour W.....6111 Harrison St. (08)
Shevick, Alexander....2620 W. Fifth Ave. (04)
Slama, George F.....6111 Harrison St. (08)
Slama, John T.....6111 Harrison St. (08)
Speer, Thomas A...Gary Sheet & Tin Mills (02)
Spellman, Frank W.....401 S. Lake (03)
Spivack, Mary.....504 Broadway (02)
Stern, Mona K.....7535 E. Harold St. (03)
Stoycoff, Christ M. (S).....860 Broadway (02)
Thomas, Daniel D.....3290 Grant St. (08)
Thomas, Gerald J.....3290 Grant St. (08)
Turgi, Robert W.....6111 Harrison St. (08)
Valencia, Monico
2606 Central Ave., East Gary (05)
Valenzuela, Roberto D.....765 Broadway (02)
Valenzuela, Sofia S.....765 Broadway (02)
Volan, George J.....2620 W. Fifth Ave. (04)
Voorhies, McKinley.....1606 Broadway (07)
Weiskopf, Henry S.....504 Broadway (02)
Wharton, Russell O. (S)....6559 Ash Place (03)
Williams, Alexander S.....436 W. 25th Ave. (07)
Williams, Carl N.....1902 W. 11th Ave. (04)
Williams, Edwin D.....436 W. 25th St. (07)
Williams, Fred R.....1119 Grant St. (04)
Wing, Herman.....1600 W. Sixth Ave. (02)
Woodward, William M.
U.S. Steel—Gary Works (02)
Yast, Charles J.....6111 Harrison St. (08)
Yocum, Paul S., Jr.....504 Broadway (02)
Yocum, William S.....9 W. Sixth Ave. (02)

Young, George M.....3656 Grant St. (08)
Young, Robert L.....504 Broadway (02)
Zucker, Edward.....504 Broadway (02)

Griffith

(*Zip Code* 46319)

Llorente, Teodulo M.....1007 E. Glen Park
Lundeberg, Ralph A.....1212 N. Broad St.
Moleski, Walter L.....128 N. Griffith Blvd.
Purcell, Richard J.....433 N. Greenwood
Siekierski, Joseph M.....145 N. Griffith

Hammond

(*Zip Code* 463 *plus zone number*).

Alfano, Joseph E.....5252 Hohman Ave. (20)
Bacevich, Andrew J.....2450 169th St. (24)
Balaguer, Carmen V.....5217 Hohman Ave. (20)
Bethea, Dennis A. (S).....1021 Field St. (20)
Brennan, Bess B.....2450 169th St. (24)
Cotter, Edward R.....2415 169th St. (24)
Davis, Thomas N. III....5246 Hohman Ave. (20)
Eggers, Ernest L. (S).....635 165th St. (24)
Egnatz, Nicholas....7330 Indianapolis Blvd. (24)
Fischer, Burnell.....49 Indi-Illi Park (24)
Friedman, Isadore E..7217 Indianapolis Blvd. (24)
Hirsch, Melvin L.....2450 169th St. (24)
Howard, William Harry (S)
5231 Hohman Ave. (20)
Jones, Eli S. (S).....50 Kenwood St. (24)
Kolanko, Leon A.....30 Douglas St. (20)
Koransky, David S.....6850 Hohman Ave. (20)
LaFollette, Forrest R.....2450 169th St. (24)
Long, Keith J.....30 Douglas St. (20)
Lutz, Andreas L.....429 Conkey (24)
McVey, Clarence A. (S)
5231 Hohman Ave. (20)
Manley, Floyd.....6010 Columbia Ave. (20)
Marks, Salvo P.....6860 Hohman Ave. (24)
Mason, Richard L.....132 Rimbach St. (20)
Modjeski, Joseph R.....7327 Knickerbocker (23)
Montes, Herminio Y.....5217 Hohman Ave. (20)
Palmer, Barron M. F.....6134 Columbia (20)
Peck, Edward A.....430 Conkey St. (24)
Peiffer, Geraldine M...St. Margaret Hospital (20)
Pilot, Jean.....5231 Hohman Ave. (20)
Polite, Nicholas L..7127 Indianapolis Blvd. (24)
Premuda, Franklin F...6625 Kennedy Ave. (23)
Ramker, Daniel T.....7040 Kennedy Ave. (23)
Remich, Antone C.....30 Douglas St. (20)
Rhind, Alexander W.....422 Conkey St. (24)
Rosenthal, Carl....St. Margaret Hospital (20)
Schwartz, Mary M.....7315 Forest Ave. (24)
Shapiro, Joseph.....2450 169th St. (23)
Solis, Roger V.....430 Conkey St. (24)
Sroka, Alexander G.....5305 Hohman Ave. (20)
Stern, Samuel L.....5231 Hohman Ave. (20)
Tilka, Edward C.....7134 Calumet Ave. (24)
Troy, Jack M.....2450 169th St. (23)
White, Gilbert H., Jr.....6429 Kennedy Ave. (23)
Wong, Samuel N.....30 Douglas St. (20)
Zallen, Stanley G.....6933 Kennedy Ave. (23)

Highland

(*Zip Code* 46322)

Angel, Virgil E.....2933 Jewett
Eugenides, Tatiana.....8136 Kennedy
Florcruz, Arturo R.....3605 43rd St.
Marquinez, Apolinario A.....8410 Delaware Pl.
Santiago, Iluminada.....8127 Kennedy
Sroka, Stanley J.....2942 Highway Ave.
Vandertoll, Donald.....8123 Kennedy Ave.
Vergara, Abelardo F.....3727 44th St.
Vore, Hugh A. (S).....8680 Prairie Ave.

Hobart

(*Zip Code* 46342)

Kellar, Philip E.....904 W. Ridge Rd.
Krsek, Archie J.....10 N. Michigan Ave.
Markle, Joseph G.....201 Main St.
Parker, Harry C. (S).....831 Garfield St.
Pike, Warren H.....108 E. Third St.
Reed, John J.....10 N. Michigan Ave.
Thomas, Andrew C.....124 Main St.

Lowell

(*Zip Code* 46356)

Smith, Robert D.....308 E. Commercial
Templin, David B.....308 E. Commercial

Wimmer, Robert N. (S).....101 Superior St.,
Michigan City
(46361)

Munster

(*Zip Code* 46321)

Allegretti, Michael L.....7905 Calumet Ave.
Alt, Edward M., Jr.....7550 Hohman Ave.
Angulo, Edilberto D.....110 Ridge Rd.
Arbeiter, Herbert I.....7550 Hohman Ave.
Arrowsmith, James L.....7550 Hohman Ave.
Avegno, John H.....7905 Calumet Ave.
Beconovich, Robert.....7905 Calumet Ave.
Bombar, Leslie E.....7905 Calumet Ave.
Branco, Arthur M.....7905 Calumet Ave.
Brenner, Howard B.....7905 Calumet Ave
Chael, Thomas C.....7905 Calumet Ave.
Church, Robert A.....110 Ridge Rd.
Costello, Albert J.....110 Ridge Rd.
DePorter, Louis A.....7905 Calumet Ave.
Eggers, Henry W.....110 Ridge Rd.
Espino, Jose C.....8144 Calumet Ave.
Feldner, Ronald P.....110 Ridge Rd.
Fetrow, Kenneth O.....7905 Calumet Ave.
Fitzpatrick, William J.....110 Ridge Rd.
Fox, Jack M.....7550 Hohman Ave.
Galante, Albert.....110 Ridge Rd.
Gardiner, H. Glenn.....7905 Calumet Ave.
Gevirtz, Milton B.....7905 Calumet Ave.
Grabow, Emil F.....7905 Calumet Ave.
Gross, Joseph O.....7905 Calumet Ave.
Hammond, Stanley.....7905 Calumet Ave.
Harvey, David M.....7905 Calumet Ave.
Hehemann, William V.....7905 Calumet Ave.
Hieber, Frank R.....7905 Calumet Ave.
Husted, Robert G.....7905 Calumet Ave.
Kelly, George G.....7905 Calumet Ave.
Kenney, Francis D.....110 Ridge Rd.
Kitt, Walter.....7550 Hohman Ave.
Kott, Alexander.....7550 Hohman Ave.
Kuhn, Arthur J.....7905 Calumet Ave.
Kuhn, Hedwig S. (S).....7905 Calumet Ave.
Lanman, John U.....8146 Calumet Ave.
Larrabee, James F.....7905 Calumet Ave.
Lautz, Herbert A.....7905 Calumet Ave.
Madlang, Rodolfo M.....7550 Hohman Ave.
Maroc, James A.....110 Ridge Rd.
Marshall, Wilbur J.....7905 Calumet Ave.
Mason, John C.....7905 Calumet Ave.
Mintz, Alfred M.....7550 Hohman Ave.
Morris, William H.....7905 Calumet Ave.
Navarre, Vincent J.....509 Ridge Rd.
Neal, Leonard W.....7905 Calumet Ave.
Paul, Eudell G.....7550 Hohman Ave.
Portney, Fred R.....7905 Calumet Ave.
Rasch, George C., Jr.....509 Ridge Road
Rawlins, Carolyn M.....7550 Hohman Ave.
Rendel, Donald T.....513 Ridge Rd.
Repay, Walter A.....513 Ridge Rd.
Rosevear, Henry J.....110 Ridge Rd.
Rubright, Robert L.....7905 Calumet Ave.
Santare, Vincent J.....513 Ridge Rd.
Schlesinger, Daniel J.....7905 Calumet Ave.
Schmitt, Robert J.....7905 Calumet Ave.
Schwartz, Jack.....7550 Hohman Ave.
Serna, Carlos A.....1417 MacArthur

Smith, Jerald E.....7905 Calumet Ave.
Smitley, Roger P.....110 Ridge Rd.
Snyder, Jerome A.....7905 Calumet Ave.
Stevens, Edwin W.....7905 Calumet Ave.
Trachtenberg, Lee.....513 Ridge Rd.
Valderrama, Hugo.....1325 MacArthur
Westhaysen, Peter V.....7550 Hohman Ave.
Willardo, Albert T.....7905 Calumet Ave.
Wooden, Thomas F.....8351 Crestwood Ave.

Egnatz, Charles D.....Rts. 41 and 30, Schererville (46375)
Skeen, Earl D. (S)..419 N. Sunnyside, South Bend (46617)

Whiting

(*Zip Code* 46394)

Becker, Samuel W.....2075 Indianapolis Blvd.
Best, Robert C.....2075 Indianapolis Blvd.
Brennan, William C.....2075 Indianapolis Blvd.
Ferry, John L.....2075 Indianapolis Blvd.
Frankowski, Clementine E...1907 New York Ave.
Greisen, Jack G.....2075 Indianapolis Blvd.
Gustaitis, John W.....2075 Indianapolis Blvd.
Kim, Young S.....2075 Indianapolis Blvd.
Kudele, Louis T.....1321 119th St.
Reed, Ronald R.....2075 Indianapolis Blvd.
Rudser, Donald H.....2075 Indianapolis Blvd.
Siler, George B.....2815 Indianapolis Blvd.
Silvian, Harry A.....1010 119th St.
Smith, Theodore J.....1542 Roberts
Sokol, Allen B.....2075 Indianapolis Blvd.
Stecy, Peter.....1902 Indianapolis Blvd.
Steen, Lowell H.....2075 Indianapolis Blvd.
Urbanski, Walter P.....2075 Indianapolis Blvd.
Weinberg, Benjamin A.....1104 119th St.

Bakos, Edward R.....7203 Sarah, Apt. 4, Maplewood, Mo. (63143)
Brand, Anna
656 Wentworth, Calumet City, Ill. (60409)
Dimitroff, Lambro.....211 Gold Coast Lane, Calumet City, Ill. (60409)
Dumanian, Ara V.....18668 Dixie Highway, Homewood, Ill. (60430)
Frahm, Charles....18668 Dixie Highway, Homewood, Ill. (60430)
Gomez, Laura F.....6255 W. 128th Pl., Palos Heights, Ill. (60463)
Gomez, Rafael A.....6255 W. 128th Pl., Palos Heights, Ill. (60463)
Hayes, Frank W.....2426 Harbor Court, Fairfield, Calif. (94533)
Hoskins, Phillip A.
824 Edgewood Pl., Ann Arbor, Mich. (48103)
Johns, David R. (S).....2080 Lapiere Rd. Beloit, Wis. (53511)
Seyler, Anna G.....2780 Hillcrest Dr., LaVerne, Calif. (91750)
Tsatsos, George C.
414 S. Wisconsin Ave., Oak Park, Ill. (60302)
Tyrrell, Joseph J.....800 State Line, Calumet City, Ill. (60409)
Tyrrell, Thomas C.
800 State Line, Calumet City, Ill. (60409)
Yanson, Mannfredo R. S...P.O. Box 2024, Oxnard, Calif. (93031)

LA PORTE COUNTY

Oak, David D., Jr.....Hanna (46340)
Oak, David D., Sr. (S).....LaCrosse (46348)

La Porte

(*Zip Code* 46350)

Backer, George P.....806 Maple Ave.
Backer, Mary B.....903 Indiana Ave.
Carpentier, James R.....1200 Michigan Ave.
Carter, Fred S.....1200 Michigan Ave.
Datzman, Basil J.....301 Wile St.
Durham, Lowell J.....316 Pine Lake Ave.
Erwin, W. Robert.....216 E St.
Farnsworth, Samuel A.....1012 Michigan Ave.
Feinn, Harry S.....1013 Indiana Ave.
Kelsey, Robert M., Jr.....1200 Michigan Ave.
Kepler, Robert W.....708 Harrison St.
Kistler, James J.....911 Maple Ave.
Lansford, Kenneth G.....1200 Michigan Ave.
Larson, Goyt O.....1110 Indiana Ave.
Mead, Frank E.....901 Indiana Ave.
Moore, William G.....1200 Michigan Ave.
Mueller, Edwin C.....1200 Michigan Ave.
Philbrook, Seth S.....705 Harrison St.
Predd, Adolph C.....909 Madison St.
Richter, John C.....1200 Michigan Ave.
Sanchez, Jose D.....403 First Natl. Bank Bldg.
Scott, John S.....806 Maple Ave.
Sirugo, Aldo C.....1200 Michigan Ave.
Smith, John A.....301 Wile St.
Sprecher, James J. J.....1001 Maple Ave.
Tabaka, Francis B.....1201 Maple Ave.
von Asch, George.....1200 Michigan Ave.
Wolf, William E.....403 First Nat'l. Bank Bldg.
Zahrt, Frank H.....Fox Village Medical Bldg.

Michigan City

(*Zip Code* 46360)

Armstrong, Thomas D.....120 W. Ninth St.
Arney, Amos.....125 E. Fifth St.
Bankoff, Milton L.....125 E. Fifth St.
Bergan, Joseph A.....217 W. Homer St.
Berkson, Myron E.....801 Washington St.
Carlson, Norman R.....913 Wabash St.
Elshout, Clem H.....2534 Lake Shore Dr.
Fargher, Francis M.....907 Washington St.
Frost, Robert J.....817 Pine St.
Gardner, Melvin D.....801 Washington St.
Gardner, Russell A.....801 Washington St.
Gilmore, Robert W.....304 Warren Bldg.
Gilmore, Russell A. (S).....304 Warren Bldg.
Hay, Gene R.....515 Pine St.
Henderson, Norman C.....131 E. Eighth St.
Hillenbrand, Charles.....128 W. 10th St.
Hodonos, Phillip E.....125 E. Fifth St.
Jones, King S.....328½ Franklin St.
Kemp, John T.....122 E. Seventh St.
Kerr, Charlotte H.....1707 Buffalo St.
Kerr, John E.....1709 Buffalo St.
Kerrigan, John F.....916 Washington St.
Kerrigan, Robert L. (S).....916 Washington St.
Kubik, Francis J.....902 Pine St.
Liddell, Charles K.....508 Pine St.
Luce, John W.....916 Washington St.
Mannion, Rodney A.....1709 Buffalo St.
Marske, Robert L.....311-13 Warren Bldg.
McGue, Frank J.....801 Washington St.
McInerney, Gerald T.....3714 S. Franklin St.
Miller, Maurice.....125 E. Fifth St.
Mladick, Edward A.....1412 Franklin St.
Novak, Clarence G.....3714 S. Franklin St.
O'Brien, Raymond J.....1412 Franklin St.
Paul, Leonard G.....515 Pine St.
Phillips, John H.....801 E. 11th St.
Pilecki, Peter J.....515 Pine St.
Plank, Charles R.....732 E. Pine St.
Quitasol, Zoilo A., Jr.....125 E. Fifth St.

Reed, Nelle C. (S).....3210 Tilden Ave.
Stark, William A.....1412 Franklin St.
Taub, Robert G.....515 Pine St.
Ticsay, Bienvenido V.....801 Washington St.
Walters, William H.....3714 Franklin St.
Weeks, Patrick H. (S).....305 N. Carroll Ave.
Weiss, Albert E.....515 Pine St.
Zalac, Donald A.....732 Pine St.

Mendez, Carlos.....Richmond State Hospital, Richmond (47374)
Weinstock, Adolph.....Rolling Prairie (46371)
Moosey, Louis.....Union Mills (46382)
Rohrer, Bryce B...506 Michigan St., Walkerton (46574)
Benz, Owen F.....Wanatah (46390)

Westville

(*Zip Code* 46391)

Bosler, Howard A.....Beatty Circle
Brauer, Abraham A.....Beatty Memorial Hospital
Dieter, William J.....Box 667
Hetman, Mitchell J.....Westville
Matthew, John R.....Beatty Memorial Hospital
Meyer, Hans.....Beatty Memorial Hospital
Morton, David P.....Beatty Memorial Hospital
Oster, Jack H.....Beatty Memorial Hospital
Ritchie, Richard F.....Beatty Memorial Hospital
Salsburg, Herbert E...Beatty Memorial Hospital
Sennett, Cecil M. (S)..Beatty Memorial Hospital

Constan, Evan.....3009 Burnet Ave., Cincinnati, Ohio (45219)

LAWRENCE COUNTY

Bedford

(*Zip Code* 47421)

Austin, Richard P.....1501 J. St.
Benham, Lawrence E...310 Stone City Bank Bldg.
Bridwell, Edgar.....1626 24th St.
Crosby, Reid C.....2900 W. 16th St.
Duncan, Raymond.....2900 W. 16th St.
Dusard, Joseph C...304 Citizens Nat'l Bank Bldg.
Edmonds, Kendrick.....Dunn Memorial Hospital
Emery, Charles B.....1027 15th St.
Fountaine, Thomas J.....1618 24th St.
Hammel, Howard T.....Citizens Nat'l. Bank Bldg.
Hawkins, Richard D.....2900 W. 16th St.
Kasting, Gerald....206 Citizens Nat'l Bank Bldg.
Kerr, Donald M.....2900 W. 16th St.
Ley, Glen D.....1303 15th St.
McPike, Joseph D.....1714 24th St.
Morrow, Robert J.....1317 L St.
Noe, William R.....2900 W. 16th St.
Reuter, John W.....1310 16th St.
Scherschel, John P.....1711 H St.
Sorrells, George W.....2900 W. 16th St.
Waldo, Guy H.....2900 W. 16th St.
Wohlfeld, Julius B.....1222 15th St.
Woolery, Richard H.....1310 W. 16th St.

Hamilton, James R...111 S. Seventh St., Mitchell (47446)
Oswalt, James T.....Mitchell (47446)

MADISON COUNTY

Alexandria

(*Zip Code* 46001)

Gaunt, Everett W.....214 E. John St.
Leroy, Alvin G.....1309 N. Harrison St.
Overpeck, George H. (S)....313 N. Harrison St.
Owen, Thomas F.....313 N. Harrison St.
Shafer, Richard H.....111 S. Harrison St.

Anderson

(*Zip Code* 460 *plus zone number.*)

Aagesen, Walter J.....1931 Brown St. (14)
Armington, Charles L.
655 Anderson Bank Bldg. (16)
Armington, Robert L.....P.O. Box 1140 (15)
Austin, Charles E.....1415 Raible St. (11)
Baughn, William L.....Guide Lamp
Beeler, Franklin K.....1931 Brown St. (14)
Bixler, Donald P.....1931 Brown St. (14)
Blassaras, Crist A.....2005 Broadway (12)
Bowers, Charles R.....2009 Brown St. (14)
Bridges, Alvin L.....1302 Madison Ave. (11)
Buckles, David L.....St. John's Hospital (14)
Bush, Edward R.....704 E. Eighth St. (12)
Campbell, Frank.....1302 Madison Ave. (11)
Caudill, Rodney C.....1308 E. Fifth St. (12)
Denny, Melvin H.....1719 N. Madison Ave. (11)
Doenges, James L.....1931 Brown St. (14)
Donaldson, Frank C.....1931 Brown St. (14)
Drake, James R.....229 Citizens Bank Bldg. (16)
Drake, John C.....604 Anderson Bank Bldg. (16)
Drennen, Robert V...1230 E. Chesterfield Dr. (12)
Dulin, Basil B.....St. John's Hospital (14)
Ellis, Seth W.....717 Anderson Bank Bldg. (16)
Elsten, Aubrey W.....1307 Park Rd. (11)
Faust, Howard M., Jr.
1508 N. Madison Ave. (11)
Ferguson, Donald H.....2009 Brown St. (14)
Fischer, Warren E.....St. John's Hospital (14)
Gahimer, Joe E.....215 W. 19th St. (14)
Gholz, Lawrence M.....Delco Remy Div. (11)
Hensler, Benton M.....1415 Raible (11)
Jarrett, Paul E.....1415 Raible (11)
Jones, Albert T.....3316 Cherry Rd. (11)
Jones, David G.....1504 N. Madison Ave. (12)
Jones, Horace E.....926 W. Vineyard (12)
Kelly, Wendell C.....704 E. Eighth St. (12)
Kiely, John T.....1931 Brown St. (14)
King, Charles R.....1415 Raible St. (11)
Kopp, William R.....333 Jackson St. (12)
Lamey, Paul T.....423 Citizens Bank Bldg. (16)
Land, Richard N.....2009 Brown St. (14)
Larmore, Joseph L..612 Anderson Bank Bldg. (16)
Litzenberger, Sam W.
610 Citizens Bank Bldg. (16)
Long, Paul L.....710 Anderson Bank Bldg. (16)
McDonald, Virgil G (S)..1019 Delaware St. (16)
Meister, Doris (S).....315 W Ninth St. (16)
Miethke, Richard P.....Delco Remy Div. (11)
Moneyhun, James E.....2009 Brown St. (14)
Morris, Robert A.....1309 Park Rd. (11)
Neale, Alfred E.....1931 Brown St. (14)
Nesbit, Leonard L...415 Citizens Bank Bldg. (16)
Patterson, William K.....1308 E. Fifth St (12)
Polhemus, Warren C.....1803 Pearl St. (16)
Price, Ambrose M...621 Citizens Bank Bldg. (16)
Reed, Roger R.....1601 Van Buskirk Rd. (11)
Rosenbaum, Lloyd E.
647 Citizens Bank Bldg. (16)
Ross, Guy E.....1931 Brown St. (14)
Sharp, William L..559 Citizens Bank Bldg. (16)
Sheldon, Suel A...508 Anderson Bank Bldg. (16)
Stamper, Joseph H.....1415 Raible (11)
Starks, William O.....3405 Nichol Ave. (11)
Stevenson, Jerry L.....St. John's Hospital (14)
Stinson, William M.....333 Jackson St. (12)
Szumilas, Peter P.....2009 Brown St. (14)
Taylor, James A.....Delco Remy Div. (11)
Wagoner, John R...708 Anderson Bank Bldg. (16)
Webb, Harry D.....515 Citizens Bank Bldg. (16)
Weiss, Louis L.....1225 N. Madison (11)
Whitaker, Jack D.....Community Hospital (11)
Wilder, Gordon B.....338 W. Eighth St. (16)
Williams, Francis M.....1132 Central Ave. (16)
Williams, Robert H.....1132 Central Ave. (16)
Woodbury, Clarence R...3405 Nichol Ave. (11)
Wright, Cecil S. (S)..207 Beverly Terrace (11)

Elwood

(*Zip Code* 46036)

Buechler, William F.....1817 S. A St.
Drake, Marion C.....1201 Main St.
Fitzpatrick, Harry W. (S)..1309 S. Anderson St.
Hanson, Martin F.....1102 S. Anderson St.
Laudeman, Walter A.....1515 N. A St.
Ploughe, Ralph R.....517 S. Anderson St.
Scea, Wallace A.....1601 S. Anderson St.
Ulrey, Robert P.....100 N. First St.

Kepner, Robert S.
P. O. Box 431, Anderson (46015)
Gray, William J.....Chesterfield (46017)
Austin, Maynard A. (S)
3900 Washington Ave., Evansville (47715)
Ferrell, Mars B.....Fortville (46040)
Bishop, Harry A.....Frankton (46044)
Ridgway, Alton H.....Lapel (46051)
Rinne, John I. (S).....Lapel (46051)
Williams, Robert D.....Markleville (46056)
Doles, Ted S.....Middletown (47356)
Foley, Phillip D.....Middletown (47356)
Reynolds, Ralph E.....Middletown (47356)
Begley, Robert W.....200 W. State St., Pendleton (46064)
Benedict, Harold G.....222 W. State St., Pendleton (46064)
Leahy, Howard J.....103 E. State St., Pendleton (46064)
Cabigas, Jose S.....Richmond State Hosp., Richmond (47374)
Van Ness, William C.....Summitville (46070)

MARION COUNTY

Zerfas, Phyllis K.
R. R. 15, Box 233-Z, Acton (46259)

Beech Grove

(*Zip Code* 46107).

Christie, Marvin C.....3655 S. Sherman Dr.
Dill, Charles W.....3655 S. Sherman Dr.
Fortuna, Frank W.....1615 Main St.
Kim, Young D. (S).....136 N. 17th St.
McNutt, Cyrus C.....2315 Bischoff Dr.
Ramage, Walter F.....244 S. First St.
Riley, Paul D. .....622 S. Fourth Ave.
Zerfas, Charles P. A.....926 Main St.

Kime, Edwin N. (S)
1007 Greenwood Ave., Bloomington (47403)
Freeman, Max E.....89 First Ave., Carmel (46032)
Hasewinkel, Carroll W...R. R. 2, Box 354, Carmel (46032)
Allen, Donald R...640 Adams, Evansville (47713)
Harris, Paul N.
Eli Lilly & Co., Toxicology Bldg. Greenfield (46140)
Pierce, Emmett C., Jr.
Eli Lilly & Co., Box 708, Greenfield (46140)
DeMotte, C. Bowen.....P.O. Box 44, Greenwood (46142)
Cohn, Alvin F.....R. R. 4, Box 747, Greenwood (46142)
Onyett, Harold R.....R. R. 3, Box 32, Greenwood (46142)

Indianapolis

(*Zip Code 462 plus zone number.*)

A

Addleman, Robert H.....5540 Woodside Dr. (8)
Adkins, Harold C.....409 E. 30th St. (5)
Albertson, Frank P.....3544 W. 16th St. (22)
Albrecht, Willard H..7400 Hollingsworth Dr. (68)
Aldrich, Harry D.....5506 E. 16th St. (18)
Aldrich, Howard....4316 E. Washington St. (1)
Alexander, Ezra D.....906 W. 27th St. (8)
Alexander, Paul J.....I.U. Medical Center (7)
Alig, Vincent B.....1815 N. Capitol Ave. (2)
All, Barbara B.....1815 N. Capitol Ave. (2)
Allen, Lawrence E.....Methodist Hospital (7)
Allen, Robert K.....3202 N. Meridian St. (8)
Alley, Thomas W...6181 N. Meridian, W. Dr. (8)
Alvis, David L.....822 Hume Mansur Bldg. (4)
Alvis, Edmond O. (S)..320 Hume Mansur Bldg. (4)
Anderson, James W.....623 N. West St. (2)
Anderson, Wendell C.
Indiana State Board of Health, 1330 W. Michigan St. (7)
Anshutz, William M.....Methodist Hospital (7)
Antreasian, Berj.....1303 N. Arlington Ave. (19)
Appel, Richard H....320 Hume Mansur Bldg. (4)
Applegate, George W.....Methodist Hospital (7)
Arbogast, John L.....I. U. Medical Center (7)
Arbuckle, William E. (S)....1150 S. Sheffield (21)
Armer, Robert M.....3500 Lafayette Rd. (22)
Armstead, John W.....2140 N. Capitol Ave. (2)
Arnold, Aaron L.....6221 N. Keystone Ave. (20)
Arnold, Robert D.....3500 Lafayette Rd. (22)
Aronson, Sidney S...618 Hume Mansur Bldg. (4)
Ashwood, Edward L.
534 Turtle Creek, N. Dr., (27)
Assue, Clare M.....LaRue D. Carter Hospital (7)
Avery, George O.....17 S. Traub (22)

B

Bachmann, Arnold J.....3440 N. Meridian St. (8)
Bader, Joseph...Eli Lilly & Co., P. O. Box 618 (6)
Baird, Melvin S.....19 W. 22nd St. (2)
Bakemeier, Otto H. (S)
5503 E. Washington St. (19)
Bakemeier, Robert E.
1303 N. Arlington Ave. (19)
Baker, Charles R.....I. U. Medical Center (7)
Baker, John C.....American United Life Ins. Co., 30 W. Fall Creek Parkway (6)
Balch, James F., Jr...709 Hume Mansur Bldg. (4)
Ball, Joseph E.....4312 E. 10th St. (1)
Balsley, Maridee A.....919 E. 46th St. (5)
Banks, Horace M. (S)
3631 Forest Manor Ave. (18)
Baptisti, Arthur, Jr.
Marion Co. General Hospital (7)
Barden, Tom P.....I.U. Medical Center (7)
Bartle, James L.....6604 Hythe Rd. (20)
Bartley, Max D.....801 Hume Mansur Bldg. (4)
Bastnagel, William F...3602 N. Meridian St. (8)
Bates, Laurence H.....3524 N. Meridian St. (8)
Batman, Gordon W.....1815 N. Capitol Ave. (2)
Battersby, J. Stanley....I. U. Medical Center (7)
Batties, Paul A.....2142 N. Capitol Ave. (2)
Bauer, Thomas B....408 Hume Mansur Bldg. (4)
Baumeister, Herbert E...1815 N. Capitol Ave. (2)
Baxter, John P.....1633 N. Capitol Ave. (2)
Beach, Robert R.
5810 E. Pleasant Run Pkwy., N. Dr. (19)
Beaver, Howard W.....2930 Madison Ave. (25)
Bechtol, Lavon D.....Lilly Research Labs., P.O. Box 618 (6)
Beck, Evart M.....915 E. 38th St. (5)
Becker, Harry G.....6060 College Ave. (20)
Beeler, John W.....712 Hume Mansur Bldg. (4)
Beeler, Raymond C. (S)
3777 N. Meridian St. (8)
Belshaw, George.....1640 N. Ritter Ave. (18)
Belt, James H.....6225 Broadway (20)
Benedict, Paul F.....3949 Meadows Dr. (5)

Bennett, Ivan F.
Lilly Clinic, Marion Co. General Hospital (7)
Bennett, James E.....I. U. Medical Center (7)
Bennhoff, David F.....I.U. Medical Center (7)
Benson, J. Thomas.....4647 W. 30th St. (22)
Berman, Edward J. ..920 Hume Mansur Bldg. (4)
Berman, Jacob K. (S)
920 Hume Mansur Bldg. (4)
Bernoske, Daniel G.
Indiana St. Board of Health, 1330 W. Michigan St. (7)
Berry, John M.....7841 White River Dr. (40)
Bhagwandin, Harry O.
4761 Southeastern Ave. (3)
Bibler, Lester D.....1815 N. Capitol Ave. (2)
Biegel, Angenieta A.....I. U. Medical Center (7)
Bill, Robert O.....3231 N. Meridian St. (8)
Black, Henry R..Marion Co. General Hospital (7)
Blackford, Florence.....5909 E. 10th St. (19)
Blackford, Ralph E. (S)....5909 E. 10th St. (19)
Blackwell, Donald S.....1815 N. Capitol Ave. (2)
Blake, Albert L.....1802 N. Illinois St. (2)
Blatt, A. Ebner.....3400 N. Meridian St. (8)
Bloemker, Edward F.....2729 Shelby St. (3)
Boggs, Eugene F.....8 E. Troy Ave. (25)
Boling, Frederick F.....3049 S. Holt Rd. (41)
Boling, Grover C.....1440 E. 46th St. (5)
Bolinger, Garry L.....512 Winona Village (2)
Bond, George S. (S)....1221 N. Delaware St. (2)
Bond, Virginia.....R. R. 17, Box 364 (23)
Bond, William H.....I. U. Medical Center (7)
Bonsett, Charles A.....6133 E. 54th Pl. (26)
Booher, Norman R.....447 E. 38th St. (5)
Booher, Olga Bonke.....447 E. 38th St. (5)
Booth, Boynton H....301 Hume Mansur Bldg. (4)
Boyer, Floyd A.....442 N. Drexel Ave. (1)
Boylan, Peter C.....I.U. Medical Center (7)
Brady, Thomas A.....1815 N. Capitol Ave. (2)
Brayton, Lee.....3930 N. Illinois St. (8)
Brickley, Harry D...605 Hume Mansur Bldg. (4)
Brickley, Richard A..605 Hume Mansur Bldg. (4)
Briggs, Robert W.....2140 N. Capitol (2)
Brillhart, James R.....1640 N. Ritter Ave. (18)
Brodie, Donald W.....817 C. of C. Bldg. (4)
Brooks, Fred R., Jr.....3349 Georgetown Rd. (24)
Brose, Paul E.....I. U. Medical Center (7)
Brough, A. Kathleen..Marion County Home (19)
Brown, Archie E...4145 Melbourne Rd., W. Dr. (8)
Brown, David E.....1944 N. Capitol Ave. (2)
Brown, DeWitt W.....1633 N. Capitol Ave. (2)
Brown, Earl R., Jr.....Community Hospital (19)
Brown, Frances T. (S)..2126 N. Talbot Ave. (2)
Brown, Frank M.....2875 Clifton (23)
Brown, Gordon T.....3989 Meadows Drive (5)
Brown, Wendell E.....3426 N. Meridian St. (8)
Browning, James S.....3120 N. Meridian St. (8)
Brownley, E. Jane..2840 N. High School Rd. (24)
Bruce, Reginald A.....2515 E. 34th St. (18)
Brueckmann, F. Robert
1815 N. Capitol Ave. #401 (2)
Buehl, Isabelle A.....301 E. 38th St. (5)
Burdette, Harold F.....3202 N. Meridian St. (8)
Burghard, Rolla D.....Community Hospital (19)
Butler, John O.....234 E. Southern Ave. (25)
Butler, Robert M.....3426 N. Meridian St. (8)

C

Cahn, Hugo M...5535 ..N. Pennsylvania St. (20)
Cahn, Peter H.....818 Hume Mansur Bldg. (4)
Caldwell, Marilyn R.....111 E. 53rd St. (20)
Call, Herbert F.....1815 N. Capitol Ave. (2)
Campbell, H. Edwin, Jr...3500 Lafayette Rd. (22)
Campbell, John A.....I. U. Medical Center (7)
Campbell, Richard W...1815 N. Capitol Ave. (2)
Campbell, Robert L.....1100 W. Michigan St. (7)
Caplin, Irvin.....1815 N. Capitol Ave. (2)
Caputi, Saverio.....3202 N. Meridian (8)
Carson, Wayne.....1802 N. Illinois St. (2)
Carter, James E.....I. U. Medical Center (7)
Cast, William R.....Methodist Hospital (7)
Chattin, William R.....4829 E. 38th St. (18)
Chavez, Mauro E.....5324 W. 16th St. (24)
Chen, Ko Kuei.....I. U. Medical Center (7)
Chernish, Stanley M.
Marion Co. General Hospital (7)
Chevalier, Robert B.....1802 N. Illinois (2)
Chivington, Paul V...407 Hume Mansur Bldg. (4)
Chroniak, Walter.....41 N. Shortridge Rd. (19)
Clark, George A.....822 Hume Mansur Bldg. (4)
Clark, Lawson J.....3736 N. Delaware St. (5)
Clevinger, William G...St. Vincent's Hospital (7)
Cline, Donald L.....Methodist Hospital (7)
Close, W. Donald.....I. U. Medical Center (7)
Coates, Jacqueline.....305 W. 42nd St. (8)
Coggeshall, Warren E...3524 N. Meridian St. (8)
Collins, Hubert L.....985 N. Arlington Ave. (19)
Collins, Robert C.....1356 W. 21st St. (2)
Conley, Joseph L. (S).....405 E. 52nd St. (5)
Conway, Chester C.....4402 E. New York St. (1)
Conway, Glenn.....1620 S. East St. (25)
Cookson, Lawrence U...3400 N. Meridian St. (8)
Cornacchione, Matthew.....814 S. East St. (25)
Cortese, James V.....3901 S. East St. (27)
Cortese, Thomas A.....3901 S. East St. (27)
Costin, Robert L.....301 E. 38th St. (5)
Coughenour, J. Robert
534 Turtle Creek, N. Dr. (27)
Countryman, Frank W...1815 N. Capitol Ave. (2)
Craft, Kenneth L. (S)
1002 Hume Mansur Bldg. (4)
Craig, Alexander F.....5470 E. 16th St. (18)
Crawford, John A...321 Hume Mansur Bldg. (4)
Cronin, H. Joseph.....3400 N. Meridian St. (5)
Cross, David G.....1002 Troy Ave. (3)
Culbertson, Clyde G.
Eli Lilly & Co., 740 S. Alabama St. (6)
Cullen, P. Kent, Jr.....310-11 Hume Mansur Bldg. (4)
Culloden, William G. (S)
4451 N. Delaware St. (5)
Cumming, James R.....Methodist Hospital (7)
Cunningham, Gene C.
Eli Lilly & Co., 740 S. Alabama St. (6)
Cure, Charles W.....1815 N. Capitol Ave. (2)
Currie, Robert W.....512 E. 57th St. (20)
Curry, R. Louis.....5705 E. 38th St. (18)
Cusick, James A.....3400 N. Meridian St. (8)
Cuthbert, Marvin P.....3400 N. Meridian St. (8)
Czenkusch, Helen G.....2840 High School Rd. (24)

D

Daley, Edward H.....5470 E. 16th St. (18)
Dallas, Fred R.....1640 N. Ritter Ave. (18)
Dallas, Mary E.
V. A. Hospital, 1481 W. 10th St. (7)
Dalton, William W.
Chrysler Corp., 2900 Shadeland Ave. (19)
Daly, Joseph M.....234 E. Southern Ave. (25)
Darbro, David A.....2307 E. Raymond St. (3)
Davidson, Dale A.....1815 N. Capitol Ave. (2)
Davidson, N. Cort.....3233 N. Meridian St. (8)
Davis, Bennie L.....2426 Northwestern Ave. (23)
Davis, Margaret M.....2603 W. 42nd St. (8)
Davis, Sam J.....908 Hume Mansur Bldg. (4)
Deal, Eleanor H.....4819 W. 15th St. (24)
Dearmin, Robert M.....3233 N. Meridian St. (8)
DeArmond, Murray.....1815 N. Capitol Ave. (2)
Deever, John W.....4131 Shelby St. (27)
Deitch, Robert D..308 Hume Mansur Bldg. (4)
Dennison, Alfred D., Jr...1815 N. Capitol Ave. (2)
Denny, Forrest L.....3351 W. 10th St. (22)
Denny, James W.....25 N. Ritter Ave. (19)
Dersch, David M.....I.U. Medical Center (7)
DeWees, Dwight L.....302 N. Bradley Ave. (1)
DeWester, Gerald M.....3037 S. Meridian St. (27)
Dickson, Carolyn L.....501 N. West St. (2)
Dill, Myron K.....3120 N. Meridian St. (8)

Dillon, John F.....Methodist Hospital (7)
Dilts, Robert L.....2521 E. 38th St. (18)
Dino, Florian S.....5202 N. Illinois St. (8)
Dintaman, Paul G...703 Hume Mansur Bldg. (4)
Dolan, Patrick A.....Methodist Hospital (7)
Donahue, James M.....1815 N. Capital Ave. (2)
Donato, Albert M.....1429 Shelby St. (3)
Doran, J. Hal.....620 Hume Mansur Bldg. (4)
Doughty, Samuel R., Jr.....5470 E. 16th St. (18)
Douglas, William T.....1815 N. Capitol Ave. (2)
Dowd, Joseph A.....Butler University Health Center, 4600 Sunset Ave. (8)
Dryden, Gale E.....5835 N. Tacoma (20)
Dugan, William M., Jr...Methodist Hospital (7)
Duncan, Stuart J.....3037 S. Meridian St. (27)
Duncan, William A.....1221 E. 86th St. (40)
Dunkin, Ramon S.....3202 N. Meridian St. (8)
Durkin, John W., Jr.....7325 N. Ritter (50)
Dyar, Edwin W.....1010 E. 86th St. (40)
Dyar, Robert W.....1010 E. 86th St. (40)
Dyke, Richard W. Marion Co. General Hospital (7)
Dyken, Mark L.....I. U. Medical Center (7)
Dyken, Paul R.....I. U. Medical Center (7)

E

Earp, Evanson B.....3368 Washington Blvd. (5)
Eastman, Joseph R., Jr.....220 W. 64th St. (60)
Eaton, Edwin R.....Community Hospital (19)
Eaton, Lyman D.....5505 N. Keystone Ave. (20)
Ebert, J. Wayne (S)....1125 Southview Dr. (27)
Eberwein, John H. (S)....2322 Wheeler Ave. (18)
Echt, Charles R.....I.U. Medical Center (7)
Edwards, Wendell L.....Methodist Hospital (7)
Egbert, Herbert L.....5317 E. 16th St. (18)
Eicher, Palmer O.....3400 N. Meridian St. (8)
Eldridge, Gail E.....1440 E. 46th St. (5)
Elkins, James P.....234 E. Southern Ave. (25)
Ellis, Charles R.....Methodist Hospital (7)
Ellis, William N.....1640 N. Ritter Ave. (18)
Emhardt, John T.....1628 S. East St. (25)
Emhardt, John W. A. (S)
5424 Washington Blvd. (20)
Evans, Frederick H.....2140 N. Capitol (2)
Evans, Paul V.... .....Methodist Hospital (7)
Everly, Ralph V.....668 E. 38th St. (5)
Everly, Stephan S.
Marion Co. General Hospital (7)

F

Failey, Robert B., Jr.....I. U. Medical Center (7)
Farrell, Joseph T.....2807 E. Michigan St. (1)
Fausset, C. Basil.. ....1815 N. Capitol Ave. (2)
Fechtman, William F.
5420 N. New Jersey St. (20)
Feeney, Martin T.....St. Vincent's Hospital (7)
Ferry, Francis A.....1638 E. Raymond St. (3)
Fiacable, Joseph P.....1315 W. 10th St. (7)
Finneran, Joseph C.....1802 N. Illinois St. (2)
Fisch, Charles.....I. U. Medical Center (7)
Fischer, A. Alan.....3500 Lafayette Rd. (22)
Fitzgerald, William J.
303 Fountain Square Theatre Bldg. (3)
Flanagan, Paul M.....3440 N. Meridian St. (8)
Flanders, Robert, Jr.....3202 N. Meridian St. (8)
Flanigan, Meredith B.....3305 Rutledge (8)
Fleischl, Herbert....Central State Hospital (22)
Flick, John J.....668 E. 38th St. (5)
Flora, Joseph O.....4317 W. Washington St. (41)
Folkening, Norval C...234 E. Southern Ave. (25)
Fosgate, Harold L.....4301 E. 38th St. (18)
Foster, John A.....Methodist Hospital (7)
Foster, Lee N.....St. Vincent's Hospital (7)
Foster, Ray D.....1944 N. Capitol Ave. (2)
Fouts, Paul J.....623 Hume Mansur Bldg. (4)
Franklin, William L..508 Hume Mansur Bldg. (4)
Franz, Sherman G...LaRue D. Carter Hospital (7)
Freed. Carl A.....2948 Kessler Blvd., N. Dr. (22)
Freeman. Leslie W.....I. U. Medical Center (7)
French, Richard N.....LaRue D. Carter Hosp. (7)
Fromhold, Willis A.....510 Willard Ave. (27)
Fry, Robert D.....607 Hume Mansur Bldg. (4)
Fugelso, Erling S...Marion County Gen'l Hosp. (7)
Fulton, William H.....1633 N. Capitol Ave. (2)
Fundenberger, Martin.....2815 E. 38th St. (18)

G

Gabovitch, Edward R.....1815 N. Capitol Ave. (2)
Gaddy, Euclid T. (S)
2602 W. Washington St. (22)
Gaddy, Nelson D.....3500 Lafayette Rd. (22)
Gambill, J. Randolph
LaRue D. Carter Hospital (7)
Gambill, William D.....1633 N. Capitol Ave. (2)
Gammieri, Robert L.....661 E. 49th St. (5)
Garceau, George J. (S)
508 Hume Mansur Bldg. (4)
Garber, J. Neill.....1815 N. Capitol Ave. (2)
Gardiner, Sprague H.....I. U. Medical Center (7)
Gardner, Buckman....St. Vincent's Hospital (7)
Garfield, Martin D.....3705 College Ave. (5)
Garner, W. Stanley.....2704 E. 62nd St. (20)
Garrett, Robert A.....I. U. Medical Center (7)
Geider, Roy A.....1525 Prospect St. (3)
Geisler, Hans E.....I.U. Medical Center (7)
George, Charles L.....1121 E. 80th St. (40)
Gibson, Greta Maxine
5744 Broadway Terrace (20)
Gick, Herman H. (S)..2705 E. Michigan St. (1)
Gifford, Fred E.....710 Hume Mansur Bldg. (4)
Gifford, J. Dean.....Methodist Hospital (7)
Gillen, H. William.....I.U. Medical Center (7)
Gillespie, Charles F.....3400 N. Meridian St. (8)
Gillespie, Jacob E...523 Hume Mansur Bldg. (4)
Gillim, Parvin D.....315 Hume Mansur Bldg. (4)
Girod, Donald A.....I.U. Medical Center (7)
Glendening, John L. (S)
7202 N. Meridian St. (60)
Glover, John L.....4124 Sunmeadow Lane (8)
Goldman, Samuel...2117 W. Washington St. (22)
Gormley, Joseph J.....2372 Lafayette Rd. (22)
Gosman, James H.....1815 N. Capitol Ave. (2)
Gotay, Jose B...Chrysler Corp., 1100 S. Tibbs (41)
Graham, Edward W.
V. A. Hospital, 1481 W. 10th St. (7)
Graham, John D.....1802 N. Illinois St. (2)
Graham, William E.....3440 N Meridian St. (8)
Gray, Howard R.....301 Hume Mansur Bldg. (4)
Gray, Kenneth L...2727 N. High School Rd. (24)
Grayson, Merrill.....I. U. Medical Center (7)
Grayson, Ted L.....1815 N. Capitol Ave. (2)
Green, Joseph B.....I. U. Medical Center (7)
Green, Morris.....Riley Hospital (7)
Greene, Morgan E.....6255 Sunnyside Rd. (36)
Gregory, Delmar R.....919 E. 46th St., #1 (5)
Gregory, Robert L.....1743 Shelby St. (3)
Greist, John H.....3231 N. Meridian St. (8)
Grief, James V.....515 N. Sherman Dr. (1)
Grief, Robert S.....2307 S. Raymond St. (3)
Griffin, Leslie W...Allison Div., General Motors (6)
Griffith, Richard S.
Lilly Clinic, Marion Co. General Hospital (7)
Griffith, Ross E.....401 E. 34th St. (5)
Grimes, Hubert N.....5516 E. 21st St. (18)
Grisell, Ted L.....5317 East 16th St. (18)
Grosz, Hanus J.....1481 W. 10th St. (7)
Gruber, Charles M.
Lilly Clinic, Marion Co. General Hospital (7)

H

Habegger, Elmer D.....1815 N. Capitol Ave. (2)
Hackney, Victor C.....I. U. Medical Center (7)
Hadley, David .....702 Hume Mansur Bldg. (4)
Haggard, Edmund B.....932 Illinois Bldg. (4)
Hall, Jack H.....Methodist Hospital (7)
Hamer, Homer G. (S)..1711 N. Capitol Ave. (7)
Hamilton, Howard B...901 S. Emerson Ave. (3)
Hampshire, Donald R.
1443 N. Pennsylvania St. (2)
Hancock, John G.....2226 W. Michigan St. (22)

Hann, Eldon C.....1633 N. Capitol Ave. (2)
Hanna, Thomas A.....1608 N. Lynhurst Dr. (24)
Harcourt, Allan K.....1919 N. Capitol Ave. (2)
Harcourt, Robert S.....1915 N. Capitol Ave. (2)
Harding, M. Richard.....3949 Meadows Dr. (5)
Harding, Myron S. (S)....3949 Meadows Dr. (5)
Hare, Earl H. (S)
Indiana State Board of Health, 1330 W. Michigan St. (7)
Hare, Laura.....404 Hume Mansur Bldg. (4)
Harger, Robert W... 804 Hume Mansur Bldg. (4)
Harris, Carl B. ....319 Hume Mansur Bldg. (4)
Harris, James C.....1010 E. 86th St. (40)
Hartenbower, David L.....Methodist Hospital (7)
Harvey, Hathaway K.....I.U. Medical Center (7)
Harvey, Verne K., Jr.
Indiana State Board of Health, 1330 W. Michigan St. (7)
Hatfield, Nicholas W.....5851 E. 54th Pl. (26)
Hawk, James H.....3736 N. Delaware St. (5)
Haymond, Joseph L.....301 E. 38th St. (5)
Haynes, John T.....1815 N. Capitol Ave. (2)
Hays, Everett L. (S).....2607 Manker Ave. (3)
Healey, Robert J.....3602 N. Meridian St. (8)
Hedrick, Philip W.....1221 E. 86th St. (40)
Heimburger, Robert F...I. U. Medical Center (7)
Helmen, Charles H.....I. U. Medical Center (7)
Henderson, Francis G.
Marion Co. General Hospital (7)
Henderson, Roscoe C.....418 E. 30th St. (5)
Hendricks, Fred A....6917 N. Keystone Ave. (20)
Hendricks, John W...911 Hume Mansur Bldg. (4)
Henry, Russell S.....725 Hume Mansur Bldg. (4)
Hepburn, C. K.....1633 N. Capitol Ave. (2)
Heubi, John E.....668 E. 38th St. (5)
Hibbeln, Thomas J.....Methodist Hospital (7)
Hickam, John B.....I. U. Medical Center (7)
Hickman, Jack W.
Marion Co. General Hospital (7)
Hicks, Murwyn L.....5470 E. 16th (18)
Hicks, Wilbur P.....1404 W. 58th St. (8)
Hildebrand, William L..2963 N. Sherman Dr. (18)
Hill, Herbert N.....3500 Lafayette Rd. (22)
Hill, James K.....3500 Lafayette Rd. (22)
Hilz, James M.....3901 S. East St. (27)
Himelstein, N. Harvey...3500 Lafayette Rd. (22)
Himler, James M.
445 N. Pennsylvania St., #809 (4)
Hines, Don C.
Eli Lilly & Co., 740 S. Alabama St. (6)
Hoffman, Herman.....650 E. 38th St. (5)
Hofmann, J. William (S)
8360 Washington Blvd. (40)
Hogan, Michael A.....6214 Broadway (20)
Holman, Jerome E., Jr.....3315 E. 10th St. (1)
Holman, Jerome E., Sr. (S)
4503 E. Kessler Blvd. (20)
Hood, Ainslee A.....910 Markwood Ave. (27)
Hoog, John M.....Methodist Hospital (7)
Hopkins, Bruce J.....St. Vincent's Hospital (7)
Horvath, George A.....Methodist Hospital (7)
Horwitz, Thomas....421 Hume Mansur Bldg. (4)
Howell, Arthur..Marion Co. General Hospital (7)
Howell, Joseph D...760 Bankers Trust Bldg. (4)
Hoyt, Lester H.....Methodist Hospital (7)
Hoyt, Millard L.....5506 E. 16th St. (18)
Hubbard, Jesse D.....I. U. Medical Center (7)
Huber, Carl P.....I. U. Medical Center (7)
Hudson, Foster J. (S).....3865 Cheviot Pl. (26)
Hull, Ronald H.....1815 N. Capitol Ave. (2)
Hummons, Francis D.
2229 Northwestern Ave. (23)
Hurteau, William W.....Methodist Hospital (7)
Huse, William M.....1815 N. Capitol Ave. (2)
Hutson, Richard A.....Methodist Hospital (7)

I

Ing, Frederic Y. W.....I.U. Medical Center (7)
Irvine, William O.....1815 N. Capitol Ave. (2)
Irwin, Glenn W., Jr.....I. U. Medical Center (7)
Iske, Paul G.....5207 Central Ave. (20)

J

Jackson, James W. (S).....463 W. 32nd St. (8)
James, Charles E.....6939 N. Michigan Rd. (68)
Janicki, Robert S.
Pitman-Moore Co., P.O. Box 1656 (6)
Jaquith, Orville S. (S) ..261 Blue Ridge Rd. (8)
Jay, Arthur C.....Methodist Hospital (7)
Jay, Arthur N.....3400 N. Meridian St. (8)
Jay, James M.....1633 N. Capitol Ave. (2)
Jenkins, Robert E.....3440 N. Meridian St. (8)
Jennings, Frank L. (S) .....60 Meridian Pl. (5)
Jewett, Joe H.....3120 N. Meridian St. (8)
Jobes, James E.....54 Monument Circle, #510 (4)
Johnson, Earl H.....1802 N. Illinois St. (2)
Johnson, Thomas W.....1802 N. Illinois St. (2)
Jones, Allen W.....6060 College Ave. (20)
Jones, David E.....828 C. of C. Bldg. (4)
Jones, Francis P.....4212 E. Michigan St. (1)
Jones, George L.....8933 Southeastern Ave. (19)
Jones, Gordon C.....1517 N. Emerson (19)
Jones, Richard A.....I. U. Medical Center (7)
Jontz, Jon P.....5470 E. 16th St. (18)
Joseph, Rex M.....59 E. Troy Ave. (25)
Jowitt, Richard H.....1502 N. Emerson (19)
Joyner, John E...3901 N. Meridian St., #336 (8)
Judd, Russell L.....1303 N. Arlington Ave. (19)
Judson, Walter E.....I. U. Medical Center (7)

K

Kahler, Maurice V. (S)...2638 Kessler Blvd. (22)
Kahn, Alexander J.....3120 N. Meridian St. (8)
Kahn, Howard L.....3120 N. Meridian St. (8)
Kaiser, James L.....1815 N. Capitol Ave. (2)
Kalsbeck, John E.....I. U. Medical Center (7)
Kammen, Leo.....3202 W. 16th St. (22)
Karsell, Philip R.
Marion Co. General Hospital (7)
Karsell, William A.....3989 Meadows Dr. (5)
Katterjohn, James C..313 Hume Mansur Bldg. (4)
Kebel, Arthur P.....4456 N. Keystone Ave. (5)
Keenan, George B.....3225 Shelby St. (27)
Keever, Charles H. (S)....5214 College Ave. (20)
Kelly, Don E...445 N. Pennsylvania St., #702 (4)
Kennedy, Hunter F.....1229 Prospect St. (3)
Kennedy, Joseph T.....5470 E. 16th St. (18)
Kenney, David B.....5506 E. 16th St. (18)
Kenzler, Jack I.....205 Hume Mansur Bldg. (4)
Kerr, Harry R.....5774 Washington Blvd. (20)
Ketcham, Jane M. (S).....3906 Ruckle St. (5)
King, Harold.....I. U. Medical Center (7)
King, Robert D.....I.U. Medical Center (7)
Kingsbury, John K. (S)
5462 E. Washington St. (19)
Kirkhoff, Paul J.....5317 E. 16th St. (18)
Kirtley, William R.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kissel, Wesley A.....1815 N. Capitol Ave. (2)
Kitterman, Harry E.....5317 E. 16th St. (18)
Klain, Benjamin V.....4157 College Ave. (5)
Klingerman, John J.....1815 N. Capitol Ave. (2)
Klutinoty, George II....3500 Lafayette Rd. (22)
Kneidel, John H.....5324 W. 16th St. (24)
Knowles, Charles Y.....5317 E. 16th St. (18)
Knowles, Robert P.
2948 Kessler Blvd., N. Dr. (22)
Kohlstaedt, Karl C.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kohlstaedt, Kenneth G.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kooiker, John E.....1815 N. Capitol Ave. (2)
Koons, Karl M. (S)..923 Hume Mansur Bldg. (4)
Kopecky, Robert R.....4131 Shelby St. (27)
Kornafel, L. H.....905 Hume Mansur Bldg. (4)
Kraft, Bennett.....760 Bankers Trust Bldg. (4)
Kremp, Richard E.....6939 N. Michigan Rd. (68)
Kriel, William B.....5630 W. Washington St. (41)

Krumholz, Richard A.
760 Bankers Trust Bldg. (4)
Kuntz, Herman W...611 Hume Mansur Bldg. (4)
Kurlander, Gerald J.....I. U. Medical Center (7)
Kurtz, Fred B. (S).....5520 N. Illinois St. (8)
Kurtz, Philip L.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kwitny, Isadore J.....3400 N. Meridian St. (8)

L

LaDine, Clarence B.....2508 Station St. (18)
Lamb, Emmett B.....205 Hume Mansur Bldg. (4)
Lamb, Russell W.....205 Hume Mansur Bldg. (4)
Lamber, Chet K.....914 Hume Mansur Bldg. (4)
Lamkin, E. Henry, Jr....1815 N. Capitol Ave. (2)
Landwehr, Alfons.....Sunnyside Sanitorium (26)
Lane, C. Elaine.....2840 N. High School (24)
Lang, Erich K.....Methodist Hospital (7)
Lang, Jay W.....5470 E. 16th St. (18)
Largaespada, Manuel.....549 S. Fleming (41)
Lashmet, Michael H..419 Hume Mansur Bldg. (4)
Lasich, Anthony R.....1815 N. Capitol Ave. (2)
Lawrance, Kingsley
Marion Co. General Hospital (7)
Lawrence, Gene C.....Methodist Hospital (7)
Lawrence, James M.....3500 Lafayette Rd. (22)
Lawson, Allan J.....1010 E. 86th St. (40)
Leasure, J. Kent (S).....5823 Brockton Dr. (20)
Leatherman, Harter L.....1502 E. 46th St. (5)
Leffel, James M.....1633 N. Capitol Ave. (2)
Leffler, William T.....2141 E. 52nd St. (5)
Lehman, Evan L.....Methodist Hospital (7)
LeMaster, Theodore R.
800 Hume Mansur Bldg. (4)
Leser, Ralph U.....3901 N. Meridian St. (8)
Levi, Leon.....40 W. 38th St. (8)
Lewis, Paul S.....6357 Rockville Rd. (24)
Lewis, R. Earl.....2531 Davis Rd. (39)
Lichtenberg, Melvin.....535 E. 38th St. (5)
Lidikay, Edward C.....3989 Meadows Dr. (5)
Lindenborg, Paul G..3016 N. Arlington Ave. (18)
Lingeman, Raleigh E....1944 N. Capitol Ave. (2)
Link, Goethe (S).....401 N. Illinois St. (4)
Littlefield, Paul A.
4040 Crooked Creek Overlook (8)
Littlefield, Shirley D.....1815 N. Capitol Ave. (2)
Lloyd, Frank P.....Methodist Hospital (7)
Loehr, William M.....I. U. Medical Center (7)
Long, Malcolm D.....7605 Westfield Blvd. (40)
Loomis, Norman S.....5416 E. 81st St. (50)
Lord, Glenn C.....104 E. 38th St. (5)
Louden, Robert W.....1221 E. 86th St. (40)
Love, George N.....5331 Washington Blvd. (20)
Lowe, John C.....1303 N. Arlington Ave. (19)
Lozow, David.....3949 Meadows Dr. (5)
Lucas, Clarence A., Jr....2012 Boulevard Pl. (2)
Lukemeyer, George T....I. U. Medical Center (7)
Lunsford, Thomas E....1815 N. Capitol Ave. (2)
Luros, J. Theodore.....1633 N. Capitol Ave. (2)
Lybrook, William B....3731 N. Keystone Ave. (18)
Lynn, Gene E.....1815 N. Capitol Ave. (2)

M

MacDougall, John D.....3949 Meadows Dr. (5)
McAlpine, Richard J..5704 N. Keystone Ave. (20)
McAree, Francis E., Jr.....5470 E. 16th St. (18)
McBride, James S. (S).....720 E. 80th St. (40)
McCallum, Donald C.....1815 N. Capitol Ave. (2)
McCallum, Joseph T. C. (S)..237 W. 46th St. (8)
McCallum, Robert N.....1815 N. Capitol Ave. (2)
McCammon, Robert E.....I.U. Medical Center (7)
McCarthy, Daniel F., Jr.
1303 N. Arlington Ave.(19)
McCartney, Donald H.
1021 Hume Mansur Bldg. (4)
McClain, Edwin S.....3500 Lafayette Rd. (22)
McCormick, Charles O., Jr..3989 Meadows Dr. (5)
McDougal, Robert A.....3202 N. Meridian St. (8)
McElroy, James T.....2933 N. Tibbs Ave. (22)
McGarvey, William K.....I.U. Medical Center (7)
McGrath, Michael F.....1929 E. 38th St. (18)
McIntyre, Charles J. (S) .3930 Carrollton Ave. (5)
McIntyre, James M.....1815 N. Capitol Ave. (2)
McKinley, A. David.....I. U. Medical Center (7)
McLaren, Daniel E.....6000 E. 46th St. (26)
McQuiston, Ralph J.....608 Guaranty Bldg. (4)
McTurnan, Robert W.....5646 N. Illinois St. (8)
Mackey, John E.....3400 N. Meridian St. (8)
Madden, Robert J.....1420 N. Audubon Rd. (19)
Madtson, A. Ricks.1815 N. Capitol Ave. #307 (2)
Magennis, Herbert L. (S)..8417 Compton Dr. (40)
Malloy, Francis E., Jr.....5470 E. 16th St. (18)
Manders, Karl L.....5506 E. 16th St. (18)
Manion, Marlow W...601 Hume Mansur Bldg. (4)
Mann, Mortimer.....3426 N. Meridian St. (8)
Manning, K. Randolph..1815 N. Capitol Ave. (2)
Manzie, Michael W.....3500 Lafayette Rd. (22)
Marks, John S., Jr.....5506 E. 16th St. (18)
Marsh, Carl M.....101 N. Shortridge Rd. (19)
Marshall, Albert L., Jr.
Indiana State Board of Health,
1330 W. Michigan St. (7)
Marshall, Cavins R. (S) .....43 W. 30th St. (8)
Martin, Hugh E.
Pitman-Moore Co., 1200 Madison Ave. (6)
Martin, Loren H....2626 W. Washington St. (22)
Martz, Bill L.
Lilly Clinic, Marion Co. General Hospital (7)
Martz, Carl D.....912 Hume Mansur Bldg. (4)
Marvel, Robert J.....3426 N. Meridian St. (8)
Masbaum, Ned P.....1315 W. 10th St. (7)
Masters, John M.....805 Hume Mansur Bldg. (4)
Masters, Robert J. (S)
805 Hume Mansur Bldg. (4)
Matthew, W. Burleigh....518 Hume Mansur Bldg. (4)
Matthews, Bernard J....966 N. Graham Ave. (19)
Matthews, William M.....I.U. Medical Center (7)
Maxam, B. T.....3524 N. Meridian St. (8)
Maxson, Roy V...Marion Co. General Hospital (7)
Maxwell, Sam B.....Eli Lilly & Co.,
P. O. Box 618 (6)
Mealey, John, Jr.....I. U. Medical Center (7)
Megenhardt, Dennis S..1633 N. Capitol Ave. (2)
Meiks, Lyman T.....Riley Hospital (7)
Melin, John R.....1815 N. Capitol Ave. (2)
Mentendiek, Maurice H.
141 Buckingham Dr. (8)
Mericle, Earl W.....1633 N. Capitol Ave. (2)
Merritt, A. Donald.....I. U. Medical Center (7)
Merritt, Doris H.....I.U. Medical Center (7)
Mershon, Jack B.....3855 E. 10th St. (1)
Mertz, John H. O.....1711 N. Capitol Ave. (7)
Michael, Isaac E...2948 Kessler Blvd., N. Dr. (22)
Middleton, Harvey N. (S)
1828 N. Illinois St. (2)
Millan, Felix....Marion Co. General Hospital (7)
Miller, Frank H.....5506 E. 16th St. (18)
Miller, Jerry A.....1815 N. Capitol Ave. (2)
Miller, Jerry R.....I. U. Medical Center (7)
Miller, John D.....Sunnyside Sanitorium (26)
Miller, L. Hoyt.....6000 E. 46th St. (26)
Miller, Roscoe E.....I. U. Medical Center (7)
Mitchell, George H...6049 E. Washington St. (19)
Moak, Glenn D.....712 Hume Mansur Bldg. (4)
Montgomery, William F.
904 Hume Mansur Bldg. (4)
Moore, Donald F...LaRue D. Carter Hospital (7)
Moore, Harold T.....1815 N. Capitol Ave. (2)
Moores, William B.
Marion Co. General Hospital (7)
Moran, William J.....1429 Shelby (3)
Morchan, Samuel.....3769 College Ave. (5)
Morgan, Margaret E....3400 N. Meridian St. (8)
Moriarty, John R.....5602 Madison Ave. (27)
Morrison, Lewis E...603 Hume Mansur Bldg. (4)
Morton, Joseph L.....St. Vincent's Hosp. (7)
Morton, Walter P. (S)
3434 Fall Creek Blvd. (5)

Moss, Bobby L.....5316 E. 16th St. (18)
Moss, Harlan B.....1640 N. Ritter Ave. (18)
Moss, Herschel C.....1640 N. Ritter Ave. (18)
Mothersill, Mark H. (S)....3650 College Ave. (5)
Mouser, Robert W.....6201 Park Ave. (20)
Mullen, James B.....3120 N. Meridian St. (8)
Muller, Lullus P.....3120 N. Meridian St. (8)
Muller, Paul F.....3440 N. Meridian St. (8)
Muller, Victor H.....St. Vincent's Hosp. (7)
Murphy, Mary M.....1633 N. Capitol Ave. (2)
Myers, Charles W. (S)..R. R. 18, Box 256 (24)

N

Nagan, Robert F.....606 Hume Mansur Bldg. (4)
Nasser, William K.....I.U. Medical Center (7)
Nay, Richard M.....3524 N. Meridian St. (8)
Need, David J.....7210 Madison Ave. (27)
Need, Louis T.....1927 S. Meridian St. (25)
Need, Richard L.....234 E. Southern Ave. (25)
Nester, Henry G.....1841 City-County Bldg. (4)
Newman, Daniel M.....1711 N. Capitol Ave. (7)
Nicholas, Dennis J.....4365 Wexford (26)
Nichols, William F.
Marion Co. General Hosp. (7)
Nie, Louis W.....3231 N. Meridian St. (8)
Nohl, John M.....457 N. Emerson Ave. (19)
Nolin, Richard T.....10447 N. College Ave. (80)
Nolting, Henry F. (S)..155 W. Hampton Dr. (8)
Norman, William H...908 Hume Mansur Bldg. (4)
Norris, Max S.....510 Hume Mansur Bldg. (4)
Nourse, Myron H.....1711 N. Capitol Ave. (7)
Nugent, Edwin J...Allison Div. GMC, Box 894 (6)
Nurnberger, John I.....I. U. Medical Center (7)

O

O'Brian, Earl J.....3500 Lafayette Rd. (22)
Ochsner, Harold C., Jr.....5215 N. Illinois St. (8)
Ochsner, Harold C.....3440 N. Meridian St. (8)
O'Connell, Noreen M.
V. A. Hospital, 1481 W. 10th St. (7)
Offutt, Andrew C...Indiana State Board of Health, 1330 W. Michigan St. (7)
Olvey, Ottis N.....3231 N. Meridian St. (8)
Otten, Claude F.....812 C. of C. Bldg. (4)
Overley, Ross A.....1815 N. Capitol Ave. (2)
Overley, Toner M., Jr.....I.U. Medical Center (7)
Owen, John E.....605 Hume Mansur Bldg. (4)
Owens, Tracy C.....2823 N. Meridian St. (8)

P

Palmer, Harley P.....Methodist Hospital (7)
Palmer, Robert M.....I. U. Medical Center (7)
Palmer, Robert W.....5398 Hillside Ave. (20)
Pantzer, John G., Jr...1815 N. Capitol Ave. (2)
Parker, George F., Jr..1502 N. Emerson Ave. (19)
Parker, John F.....6508 E. Washington St. (19)
Parker, Portia.....2226 W. Michigan St. (22)
Parks, Herbert E.....1641 N. Priscilla Ave. (18)
Parr, Robert L.....3043 E. 38th St. (18)
Paulissen, George T.....741 Markwood Ave. (27)
Pearson, John S...American United Life Ins. Co., 30 W. Fall Creek Parkway (6)
Peck, Franklin B., Jr.
Lilly Clinic, Marion Co. General Hospital (7)
Peck, Franklin B., Sr.....5833 Brockton Dr. (20)
Peirce, James D.
Eli Lilly & Co., 740 S. Alabama St. (6)
Petranoff, Theodore V. (S)
515 N. Tibbs Ave. (22)
Pfaff, Dudley A. (S)
V.A. Regional Office, 36 S. Pennsylvania St. (9)
Phillips, David L.....3400 N. Meridian St. (8)
Pickett, Robert D.....3524 N. Meridian St. (8)
Pierce, Raymond O., Jr.....3151 N. Illinois St. (8)
Pilcher, Jack E.....1802 N. Illinois St. (2)
Pile, Stafford W., Jr.....1802 N. Illinois St. (2)
Pittman, John N.....1815 N. Capitol Ave. (2)
Pontius, Edwin E.....Methodist Hospital (7)
Popplewell, Arvine G.
Marion Co. General Hospital (7)
Porter, Robert A.....6856 Chaucer Ct. (20)
Powell, Richard C.....I. U. Medical Center (7)
Powell, Tom D.....10447 N. College Ave. (80)
Pribble, Robert H.....Community Hospital (19)
Price, Francis W.
Eli Lilly & Co., P. O. Box 618 (6)
Price, James O.....512 Hume Mansur Bldg. (4)
Price, Walter S.....8430 Washington Blvd. (40)
Pryor, Richard C.....6111 College Ave. (20)

Q

Quigley, Joseph B.....5470 E. 16th St. (18)

R

Rabb, Frank M.....3740 Central Ave. (5)
Raber, Robert M.....1633 N. Capitol Ave. (2)
Rader, George S.....1815 N. Capitol Ave. (2)
Rafalski, Thomas A.....3120 N. Meridian St. (8)
Ragan, William D.....3400 N. Meridian St. (8)
Ramsey, Frank B.....1802 N. Illinois St. (2)
Randall, Thomas A.
Marion Co. General Hosp. (7)
Ransburg, Robert C.....Methodist Hospital (7)
Rapp, George F.....508 Hume Mansur Bldg. (4)
Rawls, George H.....3151 N. Illinois St. (8)
Reed, Philip B.....1815 N. Capitol Ave. (2)
Reed, Thomas E.....1303 N. Arlington Ave. (19)
Rees, Russel C.....6114 E. Washington St. (19)
Reid, Charles A.....2445 Shelby St. (3)
Reitz, Lawrence A....340 White River Pkwy. (22)
Rice, Frederic A., Jr.....7017 Pendleton Pike (26)
Rice, Raymond D.....1010 E. 86th St. (40)
Rice, Raymond M.....7799 E. Holliday Dr. (60)
Rice, Ronald B.....1010 E. 86th St. (40)
Rich, Richard B...822 Hume Mansur Bldg. (4)
Richardson, Thad T.....513 S. Sherman Dr. (3)
Richter, Arthur B...720 Hume Mansur Bldg. (4)
Ridolfo, Anthony S.
Lilly Clinic, Marion Co. General Hospital (7)
Riner, Jack K.....5317 E. 16th St. (18)
Ritchey, James O.....608 Hume Mansur Bldg. (4)
Ritter, Wayne L.....404 Hume Mansur Bldg. (4)
Robb, John A.....238 Hume Mansur Bldg. (4)
Robertson, Ray B...6118 E. Washington St. (19)
Robinson, Earle U., Jr....2416 N. Capitol Ave. (8)
Rochlin, Isidore.....3202 N. Meridian St. (8)
Roesch, Ryland P.....5439 Shorewood Dr. (20)
Roeske, Nancy A..6815 N. Pennsylvania St. (20)
Rogers, Donald L.....3426 N. Meridian St. (8)
Rohn, Robert J.....I. U. Medical Center (7)
Roller, Charles W. (S).....915 Hervey (3)
Romberger, Floyd T., Jr. 3400 N. Meridian St. (8)
Rosenak, Bernard D.....1815 N. Capitol Ave. (2)
Rosenbaum, Irving, Jr. .....401 E. 34th St. (5)
Rosenberg, Gabriel J.....6450 W. 10th St. (24)
Ross, Alexander T.....I. U. Medical Center (7)
Roth, Bertram S.....6358 College Ave. (20)
Row, D. Hamilton...906 Hume Mansur Bldg. (4)
Ruddell, Karl R. (S)...3202 N. Meridian St. (8)
Ruddell, Keith R.....3202 N. Meridian St. (8)
Rudesill, Cecil L. (S)
405 Hume Mansur Bldg. (4)
Rudesill, Robert L...405 Hume Mansur Bldg. (4)
Rusche, Thomas J.....I.U. Medical Center (7)
Rushmore, Charles H.....240 N.Meridian St. (6)
Russell, John R.....1815 N. Capitol Ave. (2)
Rust, Roland B.....3949 Meadows Drive (5)
Ruth, Martin L.....4304 E. Washington St. (1)
Ryan, Glen V.....3500 Lafayette Rd. (22)

S

Sage, Russell A., Jr.....I.U. Medical Center (7)
Sage, Russell A.....1944 N. Capitol Ave. (2)
Sanders, Fred.....6007 N. Michigan Rd. (8)
Sanders, Harry M. .....4829 E. 38th St. (18)
Saperstein, Morris....1815 N. Capitol Ave. (2)
Sappenfield, Ralph S.....Methodist Hospital (7)
Schaffer, Edward V.....1815 N. Capitol Ave. (2)
Schechter, John S.....3400 N. Meridian St. (8)
Scheier, Emil W. (S)..9220 Vandergriff Rd. (39)

Schiffer, Eva M.....5516 E. 21st St. (18)
Schlaegel, Theodore F., Jr.
I. U. Medical Center (7)
Schlegel, Donald M.....1815 N. Capitol Ave. (2)
Schmalhausen, Ansel W...1815 N. Capitol Ave. (2)
Schmidt, Loren F....605 Hume Mansur Bldg. (4)
Schmoyer, Maurice R...Community Hospital (19)
Schneider, Carl J.....1008 N. Beville Ave. (1)
Schneider, Paul A.....4829 E. 38th St. (18)
Schnute, Richard B.....I. U. Medical Center (7)
Schroeder, James E.....Methodist Hospital (7)
Schuchman, Gabriel....3620 N. Meridian St. (8)
Schumacher, Richard R...3519 N. Norfolk St. (24)
Schuster, Dwight W.....1815 N. Capitol Ave. (2)
Scofield, John B.....3120 N. Meridian St. (8)
Scott, George E.....4110 Roland Rd. (8)
Scott, I. Winfield.....3400 N. Meridian St. (8)
Scott, John R.....6214 Broadway (20)
Scott, Robert P.....209 Hume Mansur Bldg. (4)
Scott, Samuel L.....6325 Guilford Ave. (20)
Seaman, Charles F.....Community Hospital (19)
Searight, John L.....1303 N. Arlington Ave. (19)
Sedam, Herbert L.....4548 College Ave. (5)
Segar, William E.....Riley Hospital (7)
Sellmer, George W.....1221 E. 86th St. (40)
Sexson, Hiram T.....3731 N. Keystone (18)
Seybert, Thomas C.....6000 E. 46th St. (26)
Shafer, Marion R...614 Hume Mansur Bldg., (4)
Shanafelt, Donald K.....1802 N. Illinois St. (2)
Shapiro, Burton J.....3620 N. Meridian St. (8)
Sheehan, Francis G..6049 E. Washington St. (19)
Shelley, Richard J.....5470 E. 16th St. (18)
Sherster, Harry.....1135 S. Meridian St. (25)
Shipley, Edward.....1949 E. 11th St. (01)
Shullenberger, Wendell A.
1815 N. Capitol Ave. (2)
Shumacker, Harris B., Jr.,
I. U. Medical Center (7)
Sicks, Okla W. (S).....607 E. 82nd St. (20)
Siderys, Harry .....1815 N. Capitol Ave. (2)
Siebe, Jack C.....4829 E. 38th St. (18)
Siersdorfer, Theodore N. (S)
5559 W. Morris St. (41)
Sigmond, Harvey W..321 Hume Mansur Bldg. (4)
Silver, Richard A.....712 Hume Mansur Bldg. (4)
Simmons, James E.....I. U. Medical Center (7)
Simms, J. Leon....2453 Northwestern Ave. (23)
Sims, J. Lawrence.....3949 Meadows Dr. (5)
Slichenmyer, Jack E....1944 N. Capitol Ave. (2)
Sluss, David H.....808 C. of C. Bldg. (4)
Small, Iver F.....LaRue D. Carter Hospital (7)
Smith, David L. (S)
2948 Kessler Blvd., N. Dr. (22)
Smith, E. Rogers (S)
722 Hume Mansur Bldg. (4)
Smith, Francis C....1102 N. Irvington Ave. (19)
Smith, Roy Lee (S)...707 Underwriters Bldg. (4)
Snodgrass, Robert E.....1830 Winchester Dr. (27)
Sobat, William S.....Methodist Hospital (7)
Solomon, Reuben A. (S)
412 Hume Mansur Bldg. (4)
Soper, Hunter A.....3524 N. Meridian St. (8)
Souter, Martha C.....3360 N. Meridian St. (8)
Sovine, Joe W.....504 Hume Mansur Bldg. (4)
Spahr, John F., Jr.....3400 N. Meridian St. (8)
Spalding, Joseph J...706 Hume Mansur Bldg.(4)
Sparks, Alan L.....1024 Hume Mansur Bldg. (4)
Spears, John M.....7046 Madison Ave. (27)
Speckman, Glenn H.....2120 E. 10th St. (1)
Spolyar, Louis W...Indiana State Board of Health,
1330 W. Michigan St. (7)
Sputh, Carl B., Jr.....5506 E. 16th St. (18)
Stadler, Harold E.....41 N. Shortridge Rd. (19)
Stander, Richard W.....I. U. Medical Center (7)
Stansbury, William E.....5601 E. 21st St. (18)
Stayton, Chester A., Jr.
313 Hume Mansur Bldg. (4)
Steinmetz, Edward F...St. Vincent's Hospital (7)
Stephens, Donald E.....6211 College Ave. (20)
Stephens, Kuhrman H.
501 Hume Mansur Bldg. (4)
Stetson, John B.....I.U. Medical Center (7)
Stevens, Sydney L.....1802 N. Illinois St. (2)
Stoelting, Vergil K.....I. U. Medical Center (7)
Stone, Alvin T.....6202 College Ave. (20)
Stone, David F...Eli Lilly & Co., P. O. Box 618 (6)
Storey, D. Edmund.....6225 Broadway (20)
Storey, Joseph L.....3454 N. Illinois St. (8)
Storms, Roy B. (S).....812 C. of C. Bldg. (4)
Strang, William C.....1815 N. Capitol Ave. (2)
Streeter, Ralph T.....3131 E. 38th St. (18)
Strickland, Neil R.....1640 N. Ritter Ave. (18)
Stucky, Elsworth K.....1349 Madison Ave. (25)
Stump, Loyd K.....3949 Meadows Dr. (5)
Stump, Thomas A.
Marion Co. General Hospital (7)
Suelzer, John G.....1815 N. Capitol Ave. (2)
Suess, Robert E.....41 N. Shortridge Rd. (19)
Sullivan, James J.....St. Vincent's Hospital (7)
Summerlin, Jack D.....3242 N. Meridian St. (8)
Surratt, Mary Norris.....1010 E. 86th St. (40)
Sutton, William E.....5807 Brockton Dr. (20)
Swan, John R.....915 Hume Mansur Bldg. (4)
Symmes, Alfred T.....1010 E. 86th St. (40)
Szynal, John S.....2811 E. 46th St. (5)

T

Talbott, Dan E.....1802 N. Illinois St. (2)
Tanner, Henry S.....321 Hume Mansur Bldg. (4)
Taube, Jack I.....214 Hume Mansur Bldg. (4)
Tavel, Morton E.....1815 N. Capitol Ave. (2)
Taylor, Clifford C.....Community Hospital (19)
Taylor, Frederic W.....3524 N. Meridian St. (8)
Taylor, Willis D.....Ford Motor Co.,
P.O. Box 19106 (19)
Teague, Frank W...1021 Hume Mansur Bldg. (4)
Teixler, Victor A.....818 Hume Mansur Bldg. (4)
Templer, Jerry W.....I.U. Medical Center (7)
Tepfer, Milton..Marion Co. General Hospital (7)
Test, Charles E.....1006 Hume Mansur Bldg. (4)
Teter, George V.....1221 E. 86th St. (40)
Tether, Joseph E.....510 Hume Mansur Bldg. (4)
Tharpe, Ray G.....3202 N. Meridian St. (8)
Thatcher, Hugh K., Jr....4548 College Ave. (5)
Thoman, Rex L.....1815 N. Capitol Ave. (2)
Thomas, Charles R.
532 Turtle Creek, N. Dr. (27)
Thomas, E. Paul.....3450 N. Illinois St. (8)
Thomas, Fred A.....St. Vincent's Hospital (7)
Thomas, Lowell I.....1815 N. Capitol Ave. (2)
Thomas, Morris E.....1802 N. Illinois St. (2)
Thompson, John V.....7899 Ridge Rd. (40)
Thompson, Joseph F.....I. U. Medical Center (7)
Thompson, Paul D.
423 Hume Mansur Bldg. (4)
Thompson, Wayne H.....5470 E. 16th St. (18)
Thornton, Harold C.....301 E. 38th St. (5)
Throop, Frank B.....1303 N. Arlington Ave. (19)
Tindall, George T.....6002 Windsor Dr. (18)
Tinsley, Frank W.....3044 Lafayette Rd. (22)
Tinsley, Walter B., Jr.....Methodist Hospital (7)
Tinsley, Walter B. (S).....710 E. 46th St. (5)
Tischer, E. Paul.....208 Hume Mansur Bldg. (4)
Tondra, John M.....400 Hume Mansur Bldg. (4)
Torrella, Jose A.....5324 W. 16th St. (24)
Toumey, Fred L.....1802 N. Illinois St. (2)
Trudgen, Spencer F.....1010 E. 86th St. (40)
Trusler, H. Marshall..408 Hume Mansur Bldg. (4)
Trusler, Harold M....408 Hume Mansur Bldg. (4)
Tuchman, Joseph H.....2040 E. 46th St. (5)
Tucker, Warren S...414 Hume Mansur Bldg. (4)
Tyler, Edward A.....I. U. Medical Center (7)
Tyner, Harlan H.....3202 N. Meridian St. (8)

U-V

Ullom, Ralph B.....3524 N. Meridian St. (8)
Vandivier, Robert M.....I. U. Medical Center (7)
Van Dorn, Myron J.....2165 Weslynn Dr. (8)

Van Fleet, Josephine....Indiana State Board of Health, 1330 W. Michigan St. (7)
Van Meter, C. Powell.....3419 E. 10th St. (1)
Van Tassel, Charles J., Jr. 709 Hume Mansur Bldg. (4)
Van Vactor, Helen D...1815 N. Capitol Ave. (2)
Vellios, Frank.....I. U. Medical Center (7)
Vollrath, Victor J.....5202 N. Illinois St. (8)
Von Der Haar, Gerard.....6919 E. 10th St. (19)
Vore, Robert E.....5470 E. 16th St. (18)

W

Wainscott, Clinton S., Jr. 1303 N. Arlington Ave. (19)
Waldo, J. Thayer.....3989 Meadows Dr. (5)
Walther, Joseph E.....3202 N. Meridian St. (8)
Walton, William M.....1802 N. Illinois St. (2)
Ward, Wesley C.....5130 N. Meridian St. (8)
Warman, Alvah P. (S)....1363 E. 38th St. (5)
Warneke, Charles H...1815 N. Capitol Ave. (2)
Warriner, James B...1012 N. Emerson Ave. (19)
Warvel, John H., Jr. 614 Hume Mansur Bldg. (4)
Warvel, John H., Sr. (S) 614 Hume Mansur Bldg. (4)
Washington, Wilbert ....2142 N. Capitol Ave. (2)
Weaver, Dorothy E...3000 W. Washington St. (22)
Weigand, Clayton G. Eli Lilly & Co., 740 S. Alabama St. (6)
West, Joseph L.....6714 Rockville Rd. (24)
Westfall, B. Kemper.....668 E. 38th St. (5)
Wheeler, David E.....Community Hospital (19)
Wheeler, Edward C...313 Hume Mansur Bldg. (4)
White, Donald J.....3524 N. Meridian St. (8)
White, Douglas H.....3524 N. Meridian St. (8)
White, Gene A.....3628 N. Sherman Dr. (18)
White, John B., Jr.....1815 N. Capitol Ave. (2)
Widdifield, G. E....532 Turtle Creek, N. Dr. (27)
Wilbrandt, Hans R.....5324 W. 16th St. (24)
Wilkens, Irvin W.....1743 Shelby St. (3)
Williams, Charles D.....2422 Station St. (18)
Williams, Clifford L...Central State Hospital (22)
Williams, Harold W.....6000 E. 46th St. (26)
Williams, Howard S.....Community Hospital (19)
Williams, Hugh L.....4829 E. 38th St. (18)
Williams, Paul D....Central State Hospital (22)
Wilson, Fred M.....I. U. Medical Center (7)
Wirey, Harold R.....7377 S. Madison Ave. (27)
Wise, William R.....2372 Lafayette Rd. (22)
Wishard, William N., Jr..1711 N. Capitol Ave. (7)
Woerner, Thomas E...620 Hume Mansur Bldg. (4)
Wolf, Harry C.....8545 Northcrest Ct. (60)
Wolfram, Don J.....208 Hume Mansur Bldg. (4)
Wood, Donald E.....6325 Guilford Ave. (20)
Woodard, Abram S., Jr.....668 E. 38th St. (5)
Woolling, Kenneth R...230 Hume Mansur Bldg. (4)
Worley, Joseph P....5839 E. Washington St. (19)
Wray, James B.....I.U. Medical Center (7)
Wrege, Malcolm L.....1502 N. Emerson Ave. (19)
Wright, James J...LaRue D. Carter Hospital (7)
Wright, J. William, Jr. 5506 E. 16th St. (18)
Wunsch, Charles M.....5506 E. 16th St. (18)
Wyttenbach, John E...503 Hume Mansur Bldg. (4)

Y

Yacko, Michael L.....5470 E. 16th St. (18)
Yingling, Robert J.....Community Hospital (19)
Young, Don J....Marion Co. General Hospital (7)
Young, James W.....6302 Guilford Ave. (20)
Young, John E.....4829 E. 38th St. (18)
Young, John M.....1456 E. 46th St. (5)
Young, John T.....3151 N. Illinois St. (8)

Z

Zell, Evertson H.....812 C. of C. Bldg. (4)
Zeman, Ruth E.....3400 N. Meridian St. (8)
Zeps, E. Frances.....Indiana State Board of Health, 1330 W. Michigan St. (7)

Rogers, Thomas P. R. R. 3, Box 229, Jeffersonville (47130)
Lewis, Robert J. 4350 Franklin Rd., Lawrence (26)
Caplin, Samuel S. Veterans Hospital, Marion (46952)
Asher, James W...4730 W. 72nd St., New Augusta (46268)
Browning, William M. R. R. 1, Box 221-E, Nineveh (46164)
Paynter, Morris B.....59 Union St., Southport (46227)
Anderson, John T.....Pitman-Moore Co., 9550 Zionsville Rd., Zionsville (46077)
Harvey, Verne K., Sr...R. R. 2, Box 354, Zionsville (46077)
Nolan, Robert B.....Pitman-Moore Research Center, P.O. Box 10, Zionsville (46077)
Schwarz, Anton J.....Pitman-Moore Co., P. O. Box 10, Zionsville (46077)

Barrett, Robert V.....10474 Janice Lynn Circle, Cypress, Calif. (90630)
Bean, William J.....USAF Hospital, Maxwell AFB, Montgomery, Ala. (36112)
Berger, Morley.....5005 Collins Ave., Miami Beach, Fla. (33140)
Bloemker, E. Fredrick....TAC Combat Training Wing, Davis-Monthan AFB, Tucson, Ariz. (85707)
Bohner, Caryle B.....Huasca, Hidalgo, Mexico
Bomalaski, M. Donald.....7 Totten St., Ft. Leonard Wood, Mo. (65473)
Boyce, Paul A.....1954 Marlinda Way, El Cajon, Calif. (92020)
Brayton, John R., Jr.....USN Hospital, USN Aviation Med. Center, Pensacola, Fla. (32512)
Bruetsch, Walter L. (S).....2663 Tallant Rd., Santa Barbara, Calif. (93105)
Bugh, Charles W.....535 Second Ave., #101, Fairbanks, Alaska (99701)
Clark, Charles M., Jr.....Diabetes Research Foundation, 170 Pilgrim Rd., Boston, Mass. (02215)
Close, Gerald A.....Mutambara Methodist Center, P. O. Mutambara, S. Rhodesia, Africa
Cortese, Thomas A., Jr.....Letterman General Hospital, San Francisco, Calif. (94129)
Daniel, John C. (S).....531-B Via Estrada, Laguna Hills, Calif. (92653)
Dirks, Kenneth R.....406th Mobile Med. Lab., 3rd Field Hospital, APO San Francisco (96307)
Fisher, Gerald....Ippy, Central African Republic
Fulper, James C.....U.S. Army Garrison, Hunter Liggett Mil. Res., Jolan, Calif. (93928)
Gabe, William E. (S).....61 Heather Lane, Orindo, Calif. (94563)
Gabrielsen, T. H.....%Salvation Army, International P.O. Box 1192, Seoul, Korea
Gardner, Austin L.....St. Mary's Hospital, Praed St., London W 2, England
Genna, Mary M.....11801 W. Indian Trail, Hale's Corners, Wisc. (53130)
Gilliland, John E.....Clinica Evangelica Morava, Ahuas, Dept. Gracias A Dios, Honduras, C. America
Gumbert, Jack L.....57 E. Harris St., Fort Rucker, Ala. (36360)
Herod, Gilbert.....Public Health Serv. Team, USAID/USOM/Da Nang, S. Viet Nam, APO San Francisco (96337)
Holland, William M. 2709 S. 13th St., Arlington, Va. (22204)
Hurt, LaVerne B.....3102 Palm Ave., Delray Beach, Fla. (33444)
Kenoyer, Wilbur L.....USAF Hospital, Scott AFB, Ill. (62225)

Kim, Ki Ho.....Kessler Institute, Pleasant Valley Way, West Orange, N. J. (07052)
Lackey, John T.....Box 224, Hines Hospital, Hines, Ill. (60141)
Lawler, George F.....109 Esplanade, S., Venice, Fla. (33595)
Long, Michael T.....3025 Forrester Ct., San Diego, Calif. (92123)
Lord, Thomas J.....4 Beech Ave., Colorado Springs, Colo. (80906)
Lynch, William A...49th TAC Hosp., CMR #839, APO New York (09123)
Markstone, David H.
124 Monitor, Portsmouth, Va. (23707)
Mertz, Henry O., Sr. (S)...2911 Pharr Court, S., N. W., Atlanta, Ga. (30305)
Moser, Rollin H. (S)..Land O'Lakes, Wis. (54540)
Myers, Roy V. (S).....7710 Beta Circle, West Palm Beach, Fla. (33406)
Pearson, Lyman R.....1881 Ridgeway Dr., Clearwater, Fla. (33515)
Poland, Maynard D.....36th Evac. Hosp., APO, San Francisco (96291)
Rabb, Aaron.....2515 Brownsboro Rd., #6, Louisville, Ky. (40206)
Rhodes, Theodore D.
777 John Ringling Causeway, Sarasota, Fla. (33577)
Ricketts, Joseph W. (S).....136 Magnolia Dr., Ormond Beach, Fla. (32074)
Rigg, John F. (S).....1279 N. E. 97th St., Miami Shores, Fla. (33153)
Robinson, Frank C. (S).....200 Via Mentone, Newport Beach, Calif. (92660)
Rudolph, Stephen J., Jr....51st USAF Dispensary, APO, San Francisco, Calif. (96235)
Rust, Byron K.
P.O. Box 28, Big Pine Key, Fla. (33043)
Salb, Max C.....Kuttawa, Ky. (42055)
Scheeringa, Ronald H.....USPHS Hosp., Galveston, Texas (77552)
Schermer, Kenneth L.....U. S. Naval Hosp., Portsmouth, Va. (23708)
Sidel, Alan W.....130 Auburn Ave., Columbus AFB, Columbus, Miss. (39701)
Simpson, William D.....Delaware Hospital, Wilmington, Del. (19899)
Slomka, Myron B.....Shell Chemical Co., 110 W. 51st St., New York, N.Y. (10020)
Smith, Stephen M.....Escombia General Hosp., Pensacola, Fla. (32500)
Snider, Byron...R. R. 1, Box 963, Escondido, Calif. (92025)
Steury, Ernest M.....Tenwek, Sotik, Bomet, Kenya, Africa
Stoller, Leon J.....834-A Edinbow Ct., Dayton, Ohio (45433)
Strickland, James W.....9318-A Coolidge, Ellsworth AFB, S. Dakota (57701)
Takahashi, Masato.....Dept. of Pediatrics, Univ. of California, Los Angeles, Calif. (90024)
Walker, Robert M.....Hippo Valley Hosp., P. Bag 96, Chiredzi, Rhodesia, Africa
Watring, Watson G.
883-A Birch, Ft. Devens, Mass. (01433)
Weinberger, Myron H.....Stanford Univ. Med. Center, Palo Alto, Calif. (94304)
Ziperman, H. Haskell...Box 295, Balboa Heights, Canal Zone

MARSHALL COUNTY

Hampton, James N.....Argos (46501)
Swihart, John J.....Argos (46501)
Connell, Vactor O.....Bourbon (46504)
Kemp, W. Alfred.....Bourbon (46504)

Bremen

(*Zip Code* 46506)

Bowen, Otis R.....304 N. Center St.
Burket, Cecil R.....424 W. South St.
Cripe, Earl P.....119 N. Center St.
Schreiner, John E.....201 E. Plymouth
Stine, Marshall E.....424 W. South St.

Culver

(*Zip Code* 46511)

Baker, Milan D.....Culver Military Academy
Faulkner, Donald J.....W. Terrace Parkway
Hippensteel, Russell R. (S).....121 College Ave.
Howard, Joseph D.....921 Lake Shore Dr.
Rosero, M. George.....921 Lake Shore Dr.

Plymouth

(*Zip Code* 46563)

Coursey, James O., Jr.....109 N. Walnut St.
France, Lloyd C.....1223 N. Center St.
Guild, John K.....1167 Pennsylvania
Kubley, James D.....304 N. Walnut St.
Peterson, Ronald L.....116 E. Washington St.
Reed, Robert G., Jr.....109 N. Walnut St.
Reno, Edward C.....700 Ferndale St.
Rimel, James F.....1223 N. Center St.
Robertson, James S.....304 N. Walnut St.
Vore, Louring W.....116 E. Washington St.

Thompson, Alfred A. (S).....Tyner (46572)

MARTIN COUNTY

(See Daviess-Martin)

MIAMI COUNTY

Crates, Gordon C.....Denver (46926)
Sixbey, Maurice D.....Denver (46926)
Sennett, William K.....Macy (46951)

Peru

(*Zip Code* 46970)

Ferrara, Donald W.....18 W. Fifth St.
Ferrara, Samuel J.....18 W. Fifth St.
Guthrie, James U.....331 W. Third St.
Herd, Cloyn R.....15 S. Wabash St.
Hill, Lloyd L.....65 N. Miami St.
Rendel, Harold E.....302 N. Duke St.
Snyder, Parker W.....65 N. Miami St.

Malouf, Stephen D. (S).....P. O. Box 457, Bloomington, Ill. (61701)

MONROE COUNTY

(See Owen-Monroe)

MONTGOMERY COUNTY

Crawfordsville

(*Zip Code* 47933)

Alexander, Stephen J.....408 W. Market St.
Daugherty, Fred N. (S).....120 W. Pike St.
Dodds, Wemple.....Culver Hospital
Eggers, Richard R.....120 W. Pike St.
Gard, Daniel A.....R. R. Donnelley & Sons Co.
Haller, Thomas C.....411 Tinsley Ave.
Humphreys, John W.....312 Jones St.
Kirtley, James M.....Box 506 - Green Acres

Lingeman, Byron N. (S).....419 Ben Hur Bldg.
Ludwig, Paul E.....408 W. Market St.
Millis, Samuel C.....Box 506 - Green Acres
Peacock, Norman F.....219 Ben Hur Bldg.
Pierson, Robert H.....305 E. Main St.
Shannon, Wesley E.....408 W. Market St.
Viray, Victoriano G.....411 Tinsley Ave.
Wallace, Hawthorne C. (S)
R. R. Donnelley & Sons Co.

Priebe, Fred H.....Marion Co. Gen. Hosp., Indianapolis (46207)
Blix, Fred M.....Ladoga (47954)
Davis, William H.....New Market (47965)
Kindell, Hurschell D.....New Richmond (47967)
Richards, Edgar E.....Russellville (46175)
Thompson, Claude N.....Waynetown (47990)
Parker, Carl B.....Wingate (47994)

MORGAN COUNTY

Martinsville

(*Zip Code* 46151)

Brubeck, Robert E.....1220 E. Columbus
Dickens, Karl L.....95 W. Jackson St.
Drake, Ellery T.....P. O. Box 110
Eisenberg, David A.....Sunnyside Dr.
Gray, Leon.....171 E. Washington St.
Miller, Ray D.....290 E. Washington St.
Ostheimer, George.....Sunnyside Dr.
Pitkin, McKendree C. (S)....440 Washington St.
Reese, Jay S.....Sunnyside Dr., P. O. Box 30
Turner, Maurice A.....10½ N. Main St.
Van Wienen, John.....60 W. Morgan
Willan, Horace R. (S).....109 S. Jefferson St.
Winter, William P.....1390 E. Columbus

Mooresville

(*Zip Code* 46158)

Comer, Kenneth E.....R. R. 2, Box 444
Kendrick, William M.....130 Indiana St.
Kourany, Edgar.....320 N. Indiana St.
Kourany, Oscar.....320 N. Indiana St.
Van Bokkelen, Robert W.....320 N. Indiana St.

Wilson, Oliver R.....Box 525, Morgantown (46160)
Miller, Robert J.....Paragon (46166)

NEWTON COUNTY

Schoonveld, Arthur.....Brook (47922)
Parker, John C.....Goodland (47948)
Kresler, Leon E.....101 N. 4th St., Kentland (47951)
Yegerlehner, Roscoe S.
312 Sharon Dr., West Lafayette (47906)
Guzman, Marcelino F.....Morocco (47963)

NOBLE COUNTY

Bowman, Charles M.....Albion (46701)
Fitzkee, William E.....Albion (46701)
Greenlee, Joseph A., Jr.....Avilla (46710)
Sneary, Max E.....Avilla (46710)

Kendallville

(*Zip Code* 46755)

Bryan, Robert E.....705 N. State St.
Hepner, Herman.....705 N. State St.
Messer, Frank W.....115 E. Rush St.
Stallman, Carl F.....409 E. Wayne St.

Ligonier

(*Zip Code* 46767)

Hooker, Donald J.....104 S. Main St.
Stone, Robert C.....405 S. Cavin St.
Stultz, Quentin F.....401 S. Cavin St.

Slough, O. Thomas
4130 N. Kessler Blvd., Indianapolis (46208)
Fipp, August L.....Rome City (46784)
Pulskamp, Bertrand H.....Wolcottville (46795)

OHIO COUNTY

(See Dearborn-Ohio)

ORANGE COUNTY

Hagan, Marion L.....French Lick (47432)
Keseric, N. E. .....French Lick (47432)
Sugarman, Benjamin E.....French Lick (47432)
Hodgin, Phillip T.....Orleans (47452)
Schoolfield, William E.....Orleans (47452)
Clark, Ivan A.....Paoli (47454)
Manship, C. Stanley.....Paoli (47454)
McCalla, Charles X.....Paoli (47454)
Spears, John K.....Paoli (47454)

OWEN-MONROE COUNTIES

(*Zip Code* 47401)

Bloomington

Baxter, Neal E.....306 E. Fifth St.
Bidney, Evelyn B.....321 S. Jordan Ave.
Bomba, Brad J.....1920 E. Third St.
Booze, James H.....400 E. Third St.
Borland, Raymond M.....114 N. Lincoln St.
Buckingham, Richard E.....344 S. College Ave.
Byrne, Louis .....311 E. Fifth St.
Campbell, William T.....314 E. Seventh St.
Creek, Jean A.....1920 E. Third St.
Emery, Charles B., Jr.....400 E. Third St.
Estes, Ambrose C.....121 E. Kirkwood Ave.
Farr, James C.....405 E. Fourth St.
Fowler, R. Ross.....104 N. Grant St.
Geiger, Dillon D.....115 S. Lincoln St.
Hammer, Jay W.....Bloomington Hospital
Hardtke, Eldred F.....2305 E. Third St.
Hepner, Herman S.....312 N. Walnut St.
Hettle, Paul.....3901 E. Third St.
Hibner, Kermit Q.....117 N. Grant St.
Holland, Philip T.....406 S. College Ave.
Holtzman, Paul W.....113 S. Lincoln St.
Houshmand, Cyrus.....422 E. Kirkwood Ave.
Howard, William F.....300 E. Kirkwood Ave.
Hrisomalos, Frank N.....306 E. Kirkwood Ave.
Karsell, Philip R.....3901 E. Third St.

Kelley, William E.....3901 E. Third St.
Link, William C.....314 W. First St.
Lundblad, Wilfred M.....1805 E. Tenth St.
Lyons, Robert E.....P. O. Box 278
McClary, Charles W.....1920 E. Third St.
McIntire, Clarence R.....Bloomington Hospital
Manifold, Harold M.....1920 E. Third St.
Marchant, Clarence H.....350 S. College Ave.
Mather, Glenn B.....Bloomington Hospital
Middleton, Thomas O.....411 W. Howe St.
Milan, Joseph F.....311 E. Kirkwood Ave.
Morford, Guy.....314 E. Seventh St.
Owens, Walter L.....411 E. Fourth St.
Pizzo, Anthony.....Bloomington Hospital
Poolitsan, George C.....407 N. Walnut St.
Ramsey, Hugh S.....619 E. First St.
Ratts, L. D.....1920 E. Third St.
Rieger, I. Taylor.....102 N. Grant St.
Robinson, Robert D.....401 E. Fourth St.
Rogers, Otto F., Jr.....210 N. Washington St.
Rollins, Thomas K.....114 E. Seventh St.
Ross, Ben R.....314 E. Seventh St.
Ross, James B.....314 E. Seventh St.
Ruff, Jerard G.....1111 N. Walnut St.
Schaffer, James J.....703 W. Second St.
Schell, H. Richard.....422 E. Kirkwood Ave.
Schilling, Richard J.....311 E. Kirkwood Ave.
Schultheis, Richard L.....Maple Grove Rd.
Schuman, Edith B.....Indiana University
Seagle, William C.....111 E. Ninth St.
Sibbitt, Joseph W.....115 S. Lincoln St.
Smith, Herschel S.....110 S. Lincoln St.
Spencer, Beaufort A.....114 N. Lincoln St.
Stangle, William J.....640 S. Rogers
Stoner, Harold E.....409 E. Fourth St.
Taraba, Ralph W.....211 E. Martha St.
Topolgus, James N.....403 N. Walnut St.
Wass, Robert W.....311 E. Kirkwood
Way, James A.....322 E. Kirkwood Ave.
Wenzler, Paul J.....311 E. Fifth St.
White, John P., Jr.....115 S. Lincoln St.

Stouder, Charles E.....P. O. Box 405, Ellettsville (47429)
Dalton, Naomi L.....600 N. Alabama St., Riley Center 1506, Indianapolis (46204)
Reed, William C. (S).....Nashville (47448)
Mitchell, George L. (S).....Smithville (47458)

Spencer

(*Zip Code* 47460)

Brown, Marcel S.....53 W. Market St.
Skrentny, Thomas T.....792 E. Morgan St.

PARKE-VERMILLION COUNTIES

Goodrum, William R.....Cayuga (47928)

Clinton

(*Zip Code* 47842)

Evans, Frederick J.....242 S. Third St.
Herzberg, Milton.....222 Elm St.
Somerville, John W.....225 Elm St.

Webb, Lawrence C.....Dana (47847)
Britton, Welbon D.....Montezuma (47862)
May, William D...Silvercrest, New Albany (47150)
Minich, William G.....FMC Corp., Newport (47966)

Rockville

(*Zip Code* 47872)

Beebe, Milton O., Jr.....110 York St.
Bloomer, Richard S.....115 N. Market St.
Dowell, Emil H. (S).....Ohio St.
Harstad, Casper.....216 W. High St.
Kempf, Gerald F. (S).....Indiana State Hospital for Chest Diseases
Noblitt, James S. (S).....Rockville
Pirkle, Hubert B.....Indiana State Hospital for Chest Diseases

---

Gailey, Ivan L.....1332 N. Routiers Ave., Indianapolis (46219)
Pace, Jerome V. (S)
210 N. Warman Ave., Indianapolis (46222)
Fell, Robert M.....Rosedale (47874)
Greene, Frederick G. (S).....Seelyville (47878)
White, Isaac D. (S)
809 W. Broadway, Anaheim, Calif. (92805)

PERRY COUNTY

Bush, Hargis R.....Cannelton (47520)

Tell City

(*Zip Code* 47586)

Gilbert, Robert G.....Perry Co. Mem. Hosp.
Herr, John W. (S).....622 Main St.
Lohoff, Lewis C.....507 Main St.
Neifert, Noel L.....507 Main St.
Ress, Gene E.....507 Main St.
Smith, Fred, Jr.....507 Main St.
Ward, Robert A.....507 Main St.

PIKE COUNTY

Petersburg

(*Zip Code* 47567)

Hall, Donald L.....7th & Poplar Sts.
Higgins, James L.....1104 Vincennes Ave.
Omstead, Milton.....110 S. Sixth St.

PORTER COUNTY

Chesterton

(*Zip Code* 46304)

Forchetti, John A.....114 S. 11th St.
Griffin, Joseph P.....419 S. Jackson Blvd.
Hall, Thomas C.....621 Broadway
Harless, Clarence M. (S).....123 W. Indiana
Read, John E.....114 S. 11th St.
Robertson, William C.....600 E. Morgan
Shields, Duncan M.....R. R. 3, Box 248

Sun, Chen T.....Hebron (46341)
Fajardo, Manuel.....Kouts (46347)

Portage

(*Zip Code* 46368)

Carlson, Milton R.....14000 Central
Crise, John R.....14000 Central
Hoham, Frederick D.....14000 Central
Kilmer, Warren L.....14000 Central
Lands, Robert M.....14000 Central
Sturdevant, Frank M.....14000 Central
Tetrick, Lain.....National Steel Corporation

Valparaiso

(*Zip Code* 46383)

Armalavage, Leon J.....802 LaPorte Ave.
Brown, James C.....1005 Campbell St.
Covey, Thomas J.....1 Sheffield Dr.

Davis, Carl M. (S).....202 Indiana Ave.
DeGrazia, Eugene J.....810 LaPorte Ave.
Dittmer, Jack E.....60 Jefferson St.
Dittmer, Thomas L.....23 Lincolnway
Evans, Daniel R.....1306 Forest Park Ave.
Frank, John R. (S).....23 Lincolnway
Gold, Marvin E.....1005 Campbell St.
Green, Leonard J.....1005 Campbell St.
Griffin, Charles G.....813 LaPorte Ave.
Kobak, Alfred J., Jr.....802 LaPorte Ave.
Koenig, Robert L.....810 LaPorte Ave.
Keller, Theodore A.....Porter Memorial Hospital
Lee, Robert Y.....808 Lincolnway
Makovsky, Theodore.....1005 Campbell St.
Noonan, Leo C.....7 Napoleon St.
O'Neill, Martin J.....810 LaPorte Ave.
Onderak, Edward P.....558 Harrison
Poncher, John R.....17 N. Washington St.
Sacks, Leonard Z.....Porter Memorial Hospital
Scheimann, Lois.....702 Lincolnway
Stoltz, Robert M.....810 LaPorte Ave.
Vietzke, Paul C. F.....1005 Campbell St.
Wu, Stewart.....802 LaPorte Ave.

Gordon, Joseph L. (S).....Wheeler (46393)

POSEY COUNTY

Montgomery, Samuel B. (S).....Cynthiana (47612)
Ropp, Harold E.....New Harmony (47631)
Woods, Arba L. (S).....544 S. Hebron Ave., Evansville (47715)
Boren, Paul R.....Poseyville (47633)

Mount Vernon

(*Zip Code* 47620)

Challman, William B.....431 Walnut St.
Crist, John R.....105 E. Sixth St.
Hirsch, Herman L.....126 W. Fifth St.
Vogel, L. John.....131 W. Third St.

PULASKI COUNTY

Eshelman, Henry R.....Monterey (46960)
Llamas, Dominardo F.....North Judson (46366)

Winamac

(*Zip Code* 46996)

Halleck, Harold J.....119 W. Main St.
Hollenberg, Edward L.....613 Tippecanoe Dr.
Thompson, William R.....111 N. Monticello

PUTNAM COUNTY

Veach, Lester W. (S).....Bainbridge (46105)
Veach, Richard L.....Bainbridge (46105)
Ellett, John, Jr.....Coatesville (46121)
Jacobs, Rene M.....Coatesville (46121)

Greencastle

(*Zip Code* 46135)

Dettloff, Frederick R.....Alamo Bldg.
Fuson, Wenfred J.....314 Rosebud Lane
Johnson, James B.....105 E. Washington St.
Lett, James C.....239 Hillsdale
Nichols, Anne Sackett.....707 E. Seminary St.
Roof, Roger S.....DePauw Health Service
Schauwecker, Cleon M.....239 Hillsdale Ave.
Shonkwiler, Jack D.....10 Olive St.
Smith, A. Wilson.....R. R. 3, Box 111
Steele, Dick J.....Alamo Bldg.
Tipton, William R.....110 S. Vine St.
Wiseman, V. Earle (S).....239 Hillsdale Ave.

RANDOLPH COUNTY

Nixon, Byron.....Farmland (47340)
White, Harvey E.....Farmland (47340)
Jordan, Leo E.....Lynn (47355)
Shallenberger, Henry R.....Modoc (47358)
Quiambao, Hector S.....Ridgeville (47380)

Union City

(*Zip Code* 47390)

Birum, Patricia J.....334 W. Oak St.
Chambers, Carol R.....Chambers Medical Clinic
Chambers, Leroy B.....Chambers Medical Clinic
Landon, David J.....R. R. 2
McClure, Morris E.....334 W. Oak St.
Phipps, Leland K. (S).....R. R. 1, Box 63A
Reid, Robert W. (S).....726 W. Division St.
Wagoner, B. D.....Columbia and Lennox St.

Winchester

(*Zip Code* 47394)

Dininger, William S. (S).....303 S. Main St.
Koch, Howard W.....208 E. Washington St.
Painter, Lowell W.....124 E. Franklin St.
Slick, Crystal R.....457 Elm St.
Sparks, Paul W.....212 S. Main St.

RIPLEY COUNTY

Freeland, Bill E.....12 E. Boehringer, Batesville (47006)
Hisrich, Lloyd W..222 Maplewood Ave., Batesville (47006)
Paras, Jose L.....Batesville (47006)
Warn, William J.....Milan (47031)
Row, George S.....Osgood (47037)
McConnell, William C.....Sunman (47041)
Hopkins, L. H.....Versailles (47042)
Libunao, Artemio S.....Versailles (47042)

RUSH COUNTY

McNabb, Richard C.....Carthage (46115)
Smith, Stephen D.....Knightstown (46148)
Sheets, Charles E.....Manilla (46150)
Worth, C. Willard.....Milroy (46156)

Rushville

(*Zip Code* 46173)

Atkins, Clarence C.....225 N. Morgan St.
Corpe, Kenneth F.....R. R. #4
Dean, Donald I.....Fourth & Main
Ellis, Davis W., Jr.....E. 11th St.
Green, Frank H., Jr.....134 E. Second St.
Lee, John M. (S).....914 N. Morgan St.
McKee, Harry G.....208 W. First St.
Norris, Marvin G.....134 E. Second St.
Nutter, Wyndham H.....1003 N. Morgan
Schneider, Marvin C.....600 E. 11th St.

ST. JOSEPH COUNTY

Hartsough, Ralph I.....Lakeville (46536)

Mishawaka

(*Zip Code* 46544)

Barone, Carmelo V.....307 W. Fourth St.
Christophel, Verna A.....109 W. Third St.
Ganser, Richard A.....111 S. Race St.
Gerig, Eldon L.....303 S. Main St.
Lester, Vern L.....303 S. Main St.
Macri, Paul A.....116½ W. Third St.
Mahank, Camiel C.....303 S. Main St.
Orr, W. Robert.....303 S. Main St.
Reed, Robert F.....1316 Lincoln Way E.
Rosenwasser, Jacob.....225 Lincoln Way E.
Schaphorst, Richard A.....113 S. Church St.
Schlossberg, Victor E., Jr.....301 W. Fourth St.
Sellers, Francis M.....303 S. Main St.
Spalding, David L.....427 Lincoln Way E.
Spalding, Wendell L.....427 Lincoln Way E.
Stringer, Drennon D.....303 S. Main St.
Templeton, Ames R.....522 Calhoun St.
Walters, Charles E.....319 S. Spring St.
Whitlock, Merle E.....303 S. Main St.
Wilson, Douglas J.....303 S. Main St.
Wurster, Herbert C.....221 E. Third St.
Zimmer, Henry J.....119½ Lincoln Way W.

Luzadder, John E.
105 W. Michigan St., New Carlisle (46552)
Helmen, Harry W. (S)....Rolling Prairie (46371)
Warrick, Homer L....106 Lincolnway W., Osceola (46561)

South Bend

(*Zip Code 466 plus zone number.*)

A

Acker, Robert B. (S).....418 Sherland Bldg. (1)
Ahler, Kenneth J.....937 Roosevelt (16)

B

Backs, Alton J.....1831 N. Kessler Blvd. (16)
Baran, Charles.....402 Sherland Bldg. (1)
Bartsch, Harvey L.
919 E. Jefferson Blvd., #102 (17)
Beach, Norman F.....919 E. Jefferson Blvd., #107 (17)
Bechtold, S. E...919 E. Jefferson Blvd., #302 (17)
Bell, Horace D.....420 N. Hill St. (17)
Bennett, Jene R.....531 N. Main St. (1)
Berke, Robert D.....1118 Lincoln Way E. (18)
Biasini, Benedict A.....403 Dixie Way, N. (37)
Bickel, David A. (S)....1335 E. Wayne St. (15)
Birmingham, Peter J. (S).426 Sherland Bldg. (1)
Bixler, Louis C. 919 E. Jefferson Blvd., #207 (17)
Bodnar, Leslie M.....525 N. Michigan (1)
Bogan, William C.....1512 Hass (35)
Booth, Franklin M.....430 Sherland Bldg. (1)
Borough, Lester D.....710 J. M. S. Bldg. (1)
Brechtl, Harvey J.
919 E. Jefferson Blvd., #104 (17)
Buchanan, Wallace D.
919 E. Jefferson Blvd., #107 (17)
Buechner, Frederick W.
116 N. Main St., #261 (1)
Buslee, Roger M.....531 N. Main St. (1)
Bussard, Clifford F. (S)
202 Whitcomb-Keller Bldg. (1)
Bussard, Frank W.
722 E. Colfax Ave. (17)
Butts, Milton A.....118 N. Walnut St. (28)

C

Calvin, Helen M.....103 S. Eddy St. (17)
Calvin, O. Walter.....103 S. Eddy St. (17)
Carter, F. R. Nicholas (S)
2000 E. Jefferson Blvd. (17)
Cassady, James V. (S)....815 Sherland Bldg. (1)
Cassady, John R.....815 Sherland Bldg. (1)
Chamberlain, Donald S...919 E. Jefferson Blvd., #207 (17)
Chamblee, Roland W.....53287 N. Ironwood (35)
Clark, William H.....520 Sherland Bldg. (1)
Colip, George D.....514 Sherland Bldg. (1)
Colosey, Frederick J...3121 Mishawaka Ave. (15)
Cook, Gordon C.....719 N. Main St. (1)
Cooper, Harry L. (S)....410 Sherland Bldg. (1)
Cox, Alfred C.....51916 U. S. 31 N. (37)
Culbertson, Carl S.....531 N. Main St. (1)
Custer, Edward W.....Healthwin Hosp. (37)

D

Davis, Edward A.....3014 Ardmore Trail (28)
Denham, Robert H..... 919 E. Jefferson Blvd., #204 (17)
Devetski, Robert L.....514 Sherland Bldg. (1)
DeVoe, Kenneth Roy....604 N. Michigan St. (1)
Dietl, Ernest L.....820 Sherland Bldg. (1)
Dingley, Albert F.
919 E. Jefferson Blvd., #204 (17)
Dodd, Robert D.....2311 N. Miami St. (14)
Dolezal, Bernard J.....115 S. Eddy St. (17)
Donnelly, Everett F.....527 N. Michigan St. (1)
Dunlap, D. Logan.....523 J.M.S. Bldg. (1)

E

Eades, R. Charles....914 E. Jefferson Blvd. (17)
Edwards, Bernard E...2516 Twyckenham Dr. (14)
Egan, Sherman L.....523 J.M.S. Bldg. (1)
Engel, Howard R.
919 E. Jefferson Blvd., #403 (17)
English, John Paul.....211 N. Eddy (17)
Ericksen, Lester G.
919 E. Jefferson Blvd. #207 (17)
Erickson, Gustaf W.....211 N. Eddy (17)

F

Feferman, Martin E.
919 E. Jefferson Blvd., #407 (17)
Feldman, Max.....1921 Miami St. (13)
Filipek, Walter J.....311 Odd Fellows Bldg. (1)
Firestein, Ben Z. 919 E. Jefferson Blvd., #307 (17)
Firestein, Ray.....416 Sherland Bldg. (1)
Fish, Edson C.....414 Sherland Bldg. (1)
Fisher, Lawrence F. (S)..59472 S. Main St. (14)
Foley, Hansel O.....704 N. Main St. (1)
Forrest, O. Norman, Jr.....719 N. Main St. (1)
Frank, Herbert.919 E. Jefferson Blvd., #202 (17)
Frank, Lyall L., Jr.....224 W. Navarre St. (1)
Frank, Lyall L.....224 W. Navarre St. (1)
Frash, DeVon W., Jr.....1910 Miami St. (13)
Frey, William B.....316 N. Ironwood Dr. (15)
Friedman, Morris S.
919 E. Jefferson Blvd., #402 (17)
Frith, Louis G.....521 W. Washington Ave. (1)

G

Gaffney, Raymond.....535 W. Colfax Ave. (1)
Ganser, Ralph V.....302 Sherland Bldg. (1)
Gates, George E.....211 N. Eddy (17)
Gilman, Marcus M. (S).401 Odd Fellows Bldg. (1)
Godersky, George E.
919 E. Jefferson Blvd., #106 (17)
Graf, John Paul.....414 Sherland Bldg. (1)
Green, G. Richard.....822 Sherland Bldg. (1)
Green, George F.....822 Sherland Bldg. (1)
Green, Norval E.....704 N. Main St. (1)
Grillo, Donald.....226 Sherland Bldg. (1)
Grorud, Alton C.....211 N. Eddy (17)
Grove, James H. 919 E. Jefferson Blvd., #107 (17)

H

Haley, George M.....424 Sherland Bldg. (1)
Haley, Paul E.....816 Sherland Bldg. (1)
Hall, James M.....914 E. Jefferson Blvd. (17)
Hamilton, Charles O.....527 N. Michigan St. (1)
Hanley, Harriet Faith
919 E. Jefferson Blvd., #101 (17)

Harris, C. Glenn.....527 W. Colfax Ave. (1)
Haugseth, Ellsworth K.....211 N. Eddy (17)
Hawkins, Glen E.....527 N. Michigan St. (1)
Helmer, John F.....826 Sherland Bldg. (1)
Hilbert, John W. (S)
410 W. Washington Ave. (1)
Hildebrand, John O., Jr..1307 E. Ewing Ave. (13)
Hill, Theodore A.....107 N. Eddy St. (17)
Hill, Wallace C.
919 E. Jefferson Blvd., #306 (17)
Holdeman, Lillian S.....228 S. St. Joseph St. (1)
Holdeman, Richard W..404 N. Lafayette Blvd. (1)
Houser, D. Stanley.....2314 Miami (14)
How, Louis E.....1419 S. Michigan St. (13)
Hyde, Carroll C. (S)..120 N. Lafayette Blvd. (1)

J-K

Jankowski, Ernest B...411 S. Sheridan Ave. (19)
Johns, Nicholas C.....116 E. Jefferson (1)
Kamm, Bernard A.....526 Sherland Bldg. (1)
Karn, John W.....414 Sherland Bldg. (1)
Kieffer, William J.....919 E. Jefferson Blvd. (17)
Knode, Kenneth T. (S)....729 Sherland Bldg. (1)
Krueger, John E.....414 Sherland Bldg. (1)
Kuhn, Frederick L.....1215 S. Michigan St. (18)

L

Lamb, J. Leonard.....825 Sherland Bldg. (1)
Lane, William H.....604 N. Michigan St. (1)
Levatin, Bernard I.
919 E. Jefferson Blvd., #303 (17)
Levkoff, Abner H.....919 E. Jefferson Blvd., #101-03 (17)
Lionberger, John R.
919 E. Jefferson Blvd., #207 (17)
Liss, Emanuel C.....119 S. Eddy St. (17)
Lockhart, Philip B.
919 E. Jefferson Blvd., #107 (17)

M

MacDonell, Eldred H.....211 N. Eddy (17)
MacLeod, John K.....919 E. Jefferson Blvd. (17)
McCraley, William J.....218 S. Francis (37)
McFarland, Corley B.....211 N. Eddy (17)
McMeel, James.....1138 Whitehall Dr. (15)
McQuade, John A.....1522 Portage Ave. (16)
Marquis, Gordon.....211 N. Eddy (17)
Martin, Charles F.....2007 Northside Blvd. (15)
Martinov, William E.....430 Sherland Bldg. (1)
Mason, Bernard A.....211 N. Eddy (17)
Mauzy, Merritt C.....216 Sherland Bldg. (1)
Metcalfe, Grant E.
919 E. Jefferson Blvd., #308 (17)
Mott, Cassell A. (S)
1301½ W. Washington St. (1)
Mueller, Hilbert M.....211 N. Eddy (17)
Murphy, Josephine F.....111 W. Bartlett St. (1)
Myers, Philip R.....1002 Lincoln Way W. (16)

N-O

Neher, John L.....17615 State Rd. #23 (35)
Nelson, F. Dale.....704 N. Main St. (1)
Nelson, Raymond E.....206 E. Bartlett St. (1)
Nelson, Robert.....206 E. Bartlett St. (1)
Nichols, Harold G.....527 W. Colfax Ave. (1)
Olson, Donald T. 919 E. Jefferson Blvd., #309 (17)
Olson, Kenneth L.....919 E. Jefferson Blvd., #207 (17)
Oren, William F.....919 E. Jefferson Blvd., #301 (17)

P

Pairitz, Frank D.....60649 U. S. 31 S. (14)
Parsons, Robert.....919 E. Jefferson Blvd. (17)
Pascuzzi, Chris A.....531 N. Main St. (1)
Pauszek, Thomas B...704 W. Washington St. (1)
Petrass, Andrew (S).....516 Sherland Bldg. (1)
Phelps, Stephen R.....818 Sherland Bldg. (1)
Plain, George Leroy.....211 N. Eddy (17)
Proudfit, Charles H.
919 E. Jefferson Blvd., #304 (17)
Pyle, Harold D.....119 S. Eddy St. (17)

R

Rasmussen, Ruth F.....211 N. Eddy (17)
Rigaux, Armand J.....316 N. Ironwood Dr. (15)
Roberts, Billy J.....3123 Mishawaka Ave. (15)
Rosenheimer, George M...604 N. Michigan St. (1)
Rubens, Eli.....2314 Miami (14)
Rudolph, Carl J.....110 W. Bartlett St. (1)

S

Sanderson, Robert B.....730 Sherland Bldg. (1)
Sandock, Louis F.....503 Sherland Bldg. (1)
Sandoz, Harry H.....612 Odd Fellows Bldg. (1)
Saucelo, Bart M.....1401 Lincoln Way W. (28)
Schiller, Herbert A.
919 E. Jefferson Blvd., #205 (17)
Scott, Frank M.....211 N. Eddy (17)
Sharp, Merle C.....717 N. Main St. (1)
Shelley, Edward S.....207 S. Taylor St. (25)
Shriber, William H.....211 N. Eddy (17)
Shriner, Richard Lee
919 E. Jefferson Blvd., #308 (17)
Sisson, Norvel D.....531 N. Main St. (1)
Skillern, Scott D.....422 Sherland Bldg. (1)
Slominski, Harry H. (S)
708 Odd Fellows Bldg.(1)
Sobol, Zbigniew W.....525 N. Michigan St. (1)
Spenner, Raymond W.....726 Sherland Bldg. (1)
Staunton, Henry A.....3016 Mishawaka Ave. (15)
Stiver, Daniel D.....822 Sherland Bldg. (1)
Stogdill, William J.....318 Sherland Bldg. (1)
Stratigos, Joseph S.....527 N. Lafayette Blvd. (1)
Sweeney, Robert M.....211 N. Eddy (17)

T

Thompson, John M.....305 Sherland Bldg. (1)
Thompson, Robert A.
913 S. Twyckenham Dr. (15)
Thornton, Maurice J.....125 W. Marion St. (1)
Tirman, Wallace S.
919 E. Jefferson Blvd., #207 (17)
Traver, Perry C. (S)....1010 Riverside Dr. (16)
Troyer, Marlin L.....525 N. Michigan St. (1)

V-W-X-Y-Z

Vagner, S. Bernard..2201 Lincoln Way W. (28)
VanFleit, William E.
919 E. Jefferson Blvd., #407 (17)
Wack, James E.....530 W. Indiana Ave. (13)
Walker, Edwin M., Jr.....414 Sherland Bldg. (1)
Ward, James W.....325 Wakewa (17)
Weiss, Eugene.....919 E. Jefferson Blvd. (17)
White, Donald G.....1815 Ireland Rd. (14)
Wilhelm, Agatha M..1032 E. Wayne at Eddy (17)
Wilson, James M.....919 E. Jefferson Blvd. (17)
Wind, Joseph L.....919 E. Jefferson Blvd. (17)
Wixted, John F...919 E. Jefferson Blvd., #1 (17)
Wixted, Julia L...919 E. Jefferson Blvd., #1 (17)
Zeiger, Irvin L.....3123 Mishawaka Ave. (15)

Hillman, Marion W....Box 473, Westville (46391)
Cline, Kenneth L.....Box 57, Wyatt (46595)

Bassler, Carl R. (S).....R. R. # 4, Niles, Mich. (49120)
Farner, James E.....2020 E. 93rd St., Cleveland, Ohio (44106)
Fish, Clyde M. (S)
R. R. # 2, Edwardsburg, Mich. (49112)
Holtzman, Norman N.....Hines V. A. Hospital, Hines, Ill. (60141)
Rea, Thomas J.....Edwardsburg, Mich. (49112)
Walerko, Frank M.....1999 Sharondale Ave., St. Paul, Minn. (55113)

SCOTT COUNTY

Bogardus, Carl R.....61 Main St., Austin (47102)

Scottsburg

(*Zip Code* 47170)

Bates, John C.....69 Wardell St.
Castro, Ignacio B., Jr.....685 Wanda St.
McClain, Marvin L.....935 First St.
Neathamer, Thomas A...N. Gardner & White Sts.

SHELBY COUNTY

Nigh, Rufus M.....Fairland (46126)
Davis, John A.....Flat Rock (47234)

Shelbyville

(*Zip Code* 46176)

Arata, Lucian A..... 327 W. Broadway
Dalton, Wilson L.....117 W. Washington St.
Deupree, William D.....23 W. Hendricks St.
Green, William L.....103 W. Washington St.
Inlow, Paul M.....103 W. Washington St.
Inlow, Robert P.....103 W. Washington St.
Inlow, William D. (S)....103 W. Washington St.
Miller, Richard C.....17 W. Mechanic St.
Moheban, Joseph.....120 W. Jackson St.
Paz, Luis.....526 E. McKay Rd.
Richard, Norman F.....103 W. Washington St.
Scott, V. Brown.....103 W. Washington St.
Silbert, David B.....17 S. Tompkins
Spindler, Robert D.....165 W. Mechanic St.
Tindall, William R.....505 S. Harrison St.
Tower, James H., Jr.....124 W. Franklin St.
Whitcomb, Roger F.....120 W. Jackson St.

SPENCER COUNTY

Medcalf, Norman L. (S).....Lamar (47550)
Jolly, Wesley P. (S).....Richland (47634)
Glackman, John C., Jr.
6th and Main Sts., Rockport (47635)
Monar, Michael.....6th and Main Sts., Rockport (47635)

STARKE COUNTY

Leinbach, Earl R.....Hamlet (46532)

Knox

(*Zip Code* 46534)

DeNaut, James F.....4 N. Heaton St.
Henry, Howard J.....107 S. Main St.
Ingwell, Guy B.....201 S. Heaton St.
McClure, Clark.....107 S. Main St.
Palmer, W. Allen.....107 S. Main St.

STEUBEN COUNTY

Angola

(*Zip Code* 46703)

Artz, Richard W.....416 E. Maumee
Barton, Robert.....416 E. Maumee
Cameron, Don F.....416 E. Maumee
Cameron Mary H.....416 E. Maumee
Crum, Marion M.....301 E. Maumee
Davis, Claude E.....909 W. Maumee
Hartman, John J.....909 W. Maumee
Kissinger, Knight L.....411 E. Gilmore
Mason, Donald G.....112 S. Wayne St.
Rausch, Norman W.....416 E. Maumee
Schrepferman, Wayne.....Hamilton (46742)

McCormack, Lloyd L.....Box O, Jamestown, Tenn. (38556)
Yocum, Paul S., Sr.....4826 Alhambra Circle, Coral Gables, Fla. (33146)

SULLIVAN COUNTY

Brown, John S..... Carlisle (47838)
Dukes, Betty.....Dugger (47848)
Dukes, Joe.....Dugger (47848)
Bethea, Robert O.....Farmersburg (47850)
Hernandez, Antonio.....Shelburn (47879)

Sullivan

(*Zip Code* 47882)

Bedwell, Marion H.....16 N. Court St.
Crowder, James H.....112 N. Section St.
Eskew, Kenneth W.....117 W. Washington St.
McClure, Glen.....777 N. Wolfenberger
Maple, James B. (S).....117 W. Washington St.
Scott, Irvin H.....117 W. Washington St.

Daugherty, William L.....Hutsonville, Ill. (62433)
Taylor, John R.....105 N. Main, Palestine, Ill. (62451)

SWITZERLAND COUNTY

(See Jefferson-Switzerland)

TIPPECANOE COUNTY

Bahler, Dean R.....Brookston (47923)
Derhammer George L.....Brookston (47923)
Gish, Howard M.....Brookston (47923)
Dublin, Madeline P.....Francesville (47946)

Lafayette

(*Zip Code* 47904 *unless otherwise indicated.*)

Ade, Charles H.....2211 South St.
Ade, Mary Keller.....2211 South St.
Arvin, Delano Z.....2600 Greenbush
Balkema, Catherine M.....3 N. 18th St.
Bayley, William E.....2400 South St.
Beuerman, V. A. .....2600 Greenbush St.
Bolin, Robert C.....2600 Greenbush St.
Brady, Kingdon.....35 N. 25th St.
Bridge, Barton C.....Jefferson Square (47905)
Buhrmester, Harry C.....2600 Greenbush St.
Burns, John T.....5 N. 25th St.
Bush, Jack A.....405 Life Bldg. (47901)
Calvert, Raymond R.....314 N. Sixth St. (47901)
Canganelli, Vincent G.....2433 S. Ninth St. (47905)
Carpenter, James B.....15 N. 25th St.
Cartwright, Glen W.....2600 Greenbush St.
Cole, Ira (S).....2315 South St.
Coyner, Alfred B. (S).....509 Life Bldg. (47901)
Davis, Grayson B.....15 N. 25th St.
Davis, Howard B.....2600 Greenbush St.
Deur, Julius J.....1011 Columbia (47901)
Donahue, George R.....718 Life Bldg. (47901)
DuBois, Ramon B.....23 N. 25th St.

Eaton, Marion J.....214 Life Bldg. (47901)
Elliott, Paul W.....St. Elizabeth Hospital
Engeler, James E.....2600 Greenbush St.
Ferguson, William B.....2525 South St.
Fields, Don C.....2600 Greenbush St.
Flack, Russell A.....1005 Life Bldg. (47901)
Fox, Richard F.....2600 Greenbush St.
Frasch, Mahlon G.....300 Life Bldg. (47901)
Frey, Harley H., Jr.....405 Life Bldg. (47901)
Fritch, John M.....1016 Life Bldg. (47901)
Gery, Richard E.....2600 Greenbush St.
Gripe, Richard P.....2600 Greenbush St.
Haas, Charles F.....2211 South St.
Hannemann, Robert E.....2600 Greenbush St.
Harter, Eli B.....2600 Greenbush St.
Harvey, Bennett B.....35 N. 25th St.
Heid, George J., Jr.....35 N. 25th St.
Herrold, George W.....2 N. 26th St.
Holladay, Lloyd J.....411 Life Bldg. (47901)
Horswell, Richard R.....2600 Greenbush St.
Hughes, Anson F.....2424 Ferry St.
Hughes, Richard R.....31 N. 25th St.
Hull, James E.....2211 South St.
Hunsberger, Walter G.....2600 Greenbush St.
Hunter, Frank P. (S).....617 Life Bldg. (47901)
Johnson, Herbert S.....2600 Greenbush St.
Jones, David M.....24 N. 24th St.
Karberg, Richard J.....2420 Ferry St.
Klatch, Ben Z.....2211 South St.
Klepinger, Harry E.....724 Life Bldg. (47901)
Kochell, Richard L.....2600 Greenbush St.
Kohne, Robert W.....3010 Underwood
Kuipers, Fred M.....2600 Greenbush St.
Landis, Charles B.....2211 South St.
Lempke, Lloyd W.....2211 South St.
Lind, Jaap J.....2600 Greenbush St.
Loop, Frederick A.....914 Life Bldg. (47901)
McAdams, Hugh B.....2011 Kossuth St. (47905)
McAdams, Robert.....2011 Kossuth St. (47905)
McFadden, James M.....35 N. 25th St.
McKinley, Joseph.....312 Life Bldg. (47901)
McPherson, Richard C.....2600 Greenbush St.
Marsh, George W.....1216 Howell
Marvel, Howard R.....2600 Greenbush St.
Mather, Charles R.....2600 Greenbush St.
Mather, Robert L.....609 Life Bldg. (47901)
Mentzer, William G.....2424 Ferry St.
Miller, Albert J.....35 N. 25th St.
Miller, Roland E.....2200 Scott St.
Miller, William J.....2600 Greenbush St.
Mount, William M.....20 N. 24th St.
Neumann, Kenneth O...300 Main St., Room 618-20 (47901)
Onorato, Joseph J.....2433 S. Ninth St. (47905)
Peyton, Frank W.....2424 Ferry St.
Pickerill, James M.....301 Life Bldg. (47901)
Ralston, Marc A.....2600 Greenbush St.
Ramsey, George F.....2600 Greenbush
Ratcliff, Frank W.....405 Life Bldg. (47901)
Ricchetti Warren F.....St. Elizabeth Hospital
Riggs, Wendell A.....2600 Greenbush St.
Rothrock, Philip W.....2200 Scott St.
Ruschli, Edward B. (S).....510 Life Bldg. (47901)
Rutherford, Charles E.....2315 South St.
Scheeres, Jacob W.....2302 Kossuth (47905)
Shively, John L.....2525 South St.
Sholty, William M.....405 Life Bldg. (47901)
Smith, Lowell C.....637 Ferry St. (47901)
Stahl, Edward T.....2600 Greenbush St.
Steele, Hugh H.....2600 Greenbush St.
Strayer, Joseph W.....612 Life Bldg. (47901)
Stuntz, Edgar C.....Wabash Valley Hospital
Trout, Carl J.....314 N. Sixth St. (47901)
Trout, David J.....314 N. Sixth St. (47901)
Tubbs, George R. (S).2502 Iroquois Trail (47905)
Underwood, George M.....Jefferson Square (46905)
Van Buskirk, Edmund L.....2600 Greenbush St.
Van Den Bosch, Wallace R.....2216 South St.
Vermilya, Robert W.....405 Life Bldg. (47901)
Wagner, Anabel.....405 Life Bldg. (47901)
Wagner, Lindley.....2424 Ferry St.
Waits, Chester L.....15 N. 25th St.
Webster, Paul L.....2600 Greenbush St.
Weida, Jerry M.....301-5 Life Bldg. (46901)
Weller, Wendell A.....2600 Greenbush St.
Wong, Norman F.....15 N. 25th St.

Peterson, Joel A. (S).....R. R. 5, Monticello (47960)
Babb, Forrest J.....Stockwell (47983)

West Lafayette

(*Zip Code* 47906)

Baker, John R.....2321 Carmel Dr.
Carpenter, Robert S.....207 North St.
Carroll, Bertha Rose.....1125 Glenway
Crockett, Franklin S. (H).....424 Littleton St.
Evans, David L.....2900 N. River Rd.
Fitzgerald, Brice E.....Purdue Health Center
Hass, Caroline E.....402 Northwestern Ave.
Hass, Thomas W.....402 Northwestern Ave.
Heasty, Alfred R.....Purdue Health Center
Hunter, Dean M.....402 Northwestern Ave.
Keplinger, James E.....402 Northwestern Ave.
Martin, Joe M.....2900 N. River Rd.
Roggenkamp, Milton W.....144 Arrowhead Dr.
Rommel, Clarence H.....456 Northwestern
Russell, Henry T.....746 Northridge
Schmiedicke, Paul H.....Purdue University
Spurlock, Fae H.....Purdue Health Center
Van Kirk, John R.....2496 Sycamore Lane
Wilms, John H.....Purdue University

TIPTON COUNTY

Haller, Robert L.....Kempton (46049)
Stouder, Albert E.....Kempton (46049)

Tipton

(*Zip Code* 46072)

Burkhardt, Boyd A.....202 S. West St.
Carter, Jean V.....130 N. Main St.
Compton, George L.....219 N. Independence
Gossard, Meredith B.....308 N. Independence
Kincaid, Raymond K.....202 S. West St.
Kurtz, William A.....202 S. West St.

Ericson, Harold L.....Windfall (46076)
Moser, Elmer B. (S).....Windfall (46076)
Tranter, William F.....2337 Flora Ave., Ft. Myers, Fla. (33901)

UNION COUNTY

(See Wayne-Union)

VANDERBURGH COUNTY

(*Zip Code 477 plus zone number.*)

Evansville

A

Acre, Robert R. (S).....3700 Bellemeade (15)
Adler, Raymond N.....714 Second Ave. (10)
Adye, Wallace M., Jr...1307 N. Stringtown Rd. (11)
Alexander, John E.....1127 Lincoln Ave. (14)
Allen, William H.....715 First Ave. (10)
Anderson, Milton H...Evansville State Hosp. (2)
Antes, Earl H.....420 Cherry St. (13)
Arendell, Robert E.....1666 S. Lodge Ave. (14)
Austin, Eugene W.....3700 Bellemeade (15)

B

Baker, Herman M. (S).....715 First Ave. (10)
Baker, Mason R.....1008 S. Evans Ave. (13)
Baker, Sam B.....Deaconess Hospital (10)
Barnhart, Willard T.....701 Chestnut St. (13)
Beck, Robert E.....715 First Ave. (10)
Begley, Joseph W., Jr. 314 S. E. Riverside Dr. (13)
Beisel, Larry H.....420 Cherry St. (13)
Bender, Martin J.....912 Hulman Bldg. (8)
Bendush, Cecil L.....Mead Johnson Research Center (21)
Bennett, Abner P.....412 S. E. Fourth St. (13)
Bissonnette, Roger P.....420 Cherry St. (13)
Bloss, Bryant A.....715 First Ave. (10)
Boone, Robert D.....420 Cherry St. (13)
Boswell, Robert W. C.....2351 Division St. (14)
Boyle, Carroll L.....715 First Ave. (10)
Brakel, Frank J., Jr.....420 Cherry St. (13)
Britt, Robert L.....420 Cherry St. (13)
Brockmole, Arnold W.....201 S.E. Third St. (13)
Brooks, Edwin A.....5620 Kratzville Rd. (10)
Bryan, Stanton L.....607 Hulman Bldg. (8)
Buddrus, David J.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Buehner, Donald F.....3700 Bellemeade (15)
Burger, Thomas C.....3700 Bellemeade (15)
Burnikel, Ray H.....517 Sycamore St. (8)

C

Carlson, Ralph F.....517 Sycamore St. (8)
Cates, Jeryl R.....3700 Bellemeade Ave. (15)
Clark, Thomas W.....420 Cherry St. (13)
Clouse, Paul A.....613 S. Weinbach Ave. (14)
Cockrum, William M.....908 Hulman Bldg. (8)
Coleman, Joseph E.....3700 Bellemeade (15)
Combs, Herman T.....807 W. Indiana (10)
Combs, John H.....412 S. E. Fourth St. (13)
Cooper, Waller W.....Deaconess Hospital (10)
Corcoran, Patrick J. V.....3700 Bellemeade (15)
Cox, J. Bruce.....420 Cherry St. (13)
Crawford, James H.....221 Chestnut St. (13)
Crevello, Albert J.....3700 Bellemeade (15)
Crimm, Paul D.....Boehne Hospital (12)
Crudden, Charles H...Clearview Sanitarium (10)
Cullnane, Chris W.....2312 W. Franklin St. (12)

D

Davidson, Harold H.....420 Cherry St. (13)
Davis, Kenneth D.....420 Cherry St. (13)
Davis, Max D.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Denzer, Edward K.....108 S. E. Third St. (8)
Denzer, William O.....923 Bellemeade (13)
Dieckman, Herbert S.....3700 Bellemeade (15)
Dodd, Roberts K.....2042 Lincoln Ave. (14)
Downer, Luther H.....521 Oak Street (13)
Drake, Dale W.....St. Mary's Hospital (10)
Durkee, Melvin S.....3700 Bellemeade (15)
Dycus, Walter A.....319 N. St. Joseph Ave. (12)
Dyer, Wallace K.....3700 Bellemeade (15)

E

Ebin, Judah L.....101 S. E. Third St. (8)
Engel, Edgar L.....126 S. E. Seventh St. (8)
Ewer, Robert W.....420 Cherry St. (13)

F

Faul, Henry J.....815 Hulman Bldg. (8)
Faw, Melvin L.....420 Cherry St. (13)
Fenneman, Robert J.....402 S. E. Seventh St. (13)
Fisher, William C.....715 First Ave. (10)

G

Garland, Edgar A.....606 S. Weinbach (14)
Garst, Garland R.....3700 Bellemeade (15)
Gaul, L. Edward.....509 Hulman Bldg. (8)
Geller, Samuel.....R. R. 8, Box 143A (11)
Getty, William H.....420 Cherry St. (13)
Giorgio, Douglas J.....916 S. Burkhardt Rd. (15)
Goldbeck, Larry O.....3721 Lincoln Ave. (15)
Gourieux, E. De Verre.....3700 Bellemeade (15)
Greenberg, Louis T...2301 W. Michigan St. (12)
Griep, Arthur H.....5414 Madison Ave. (15)
Grimm, William C. H., Jr.....420 Cherry St. (13)
Guckien, Joseph L.....715 First Ave. (10)

H

Hachmeister, Charles W. 2301 W. Michigan St. (12)
Hammond, R. Case.....701 Chestnut St. (13)
Hare, Daniel M.....5029 Lincoln Ave. (15)
Hargett, Isaac R.....420 Cherry St. (13)
Harlan, William L.....3700 Bellemeade (15)
Harned, Ben K., Jr.....420 Cherry St. (13)
Harris, Robert L.....2014 E. Morgan (11)
Hart, L. Paul.....3700 Bellemeade (15)
Hartley, Clarence A., Jr...221 Chestnut St. (13)
Hartz, F. Minton.....123 S. E. Second St. (8)
Hassel, Walter B.....3712 Herndon Dr. (11)
Healy, Cornelius E.....420 Cherry St. (13)
Heard, Albert.....322 E. Cherry St. (13)
Heimburger, Irvin L.....527 Sycamore St. (8)
Heinrich, Weston A...314 S. E. Riverside Dr. (13)
Hendershot, Eugene L...412 S. E. Fourth St. (13)
Hermayer, Stephen....220 S. E. Seventh St. (13)
Herrmann, Gordon T.....3700 Bellemeade (15)
Herzer, Clarence C.....322 N. Fulton (10)
Himebaugh, Gilbert J.....115 N. Weinbach (11)
Hobbs, Arthur A.....715 First Ave. (10)
Hobgood, James L., Jr...7527 Taylor Circle (15)
Hoopes, Jane M.....3700 Bellemeade (15)
Hoover, J. Guy.....527 Sycamore St. (8)
Hovda, Richard B.....St. Mary's Hospital (15)
Huggins, Victor S.....715 First Ave. (10)

J

Johnson, Victor.....2301 W. Michigan St. (12)
Johnson, Stephen L.....521 Sycamore St. (8)

K

Kauffman, Harley M. (S)....219 Walnut St. (8)
Kelly, John B.....420 Cherry St. (13)
Kessler, Robert B.....1338 Division St. (14)
Kiechle, Frederick L.....1018 Parrett St. (13)
Kimmel, George E.....429 S. St. James Blvd. (14)
Kincaid, Robert S.....1000 N. Spring St. (11)
Kleindorfer, Roscoe L...819 W. Franklin St. (10)

L

Langsam, Charles L.....4511 Bellemeade (15)
Laubscher, Clarence.....1201 Laubscher Rd. (10)
Lawler, John F.....420 Cherry St. (13)
Lawrence, Joseph C.....715 First Ave. (10)
Leibundguth, Henry.....3700 Bellemeade (15)
Leich, Charles F.....124 S. E. First St. (8)
Lessure, Alfred P.....420 Cherry St. (13)
Longstaff, John P.....200 Cherry St. (13)
Lynch, Harold D.....3401 Koring Rd. (12)

M

MacKenzie, Pierce.....126 S. E. Seventh St. (8)
McCool, Joseph H.....1 Woodmere Lane (11)
McDonald, Joseph D.....517 Sycamore St. (8)
McPherson, Thomas C.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Marvel, James A.....420 Cherry St. (13)
Mason, Everett E.....118 S. E. First St. (8)
Mathews, James R.....715 First Ave. (10)
Miller, LaVerne B.....1421 N. Main St (11)
Miller, Milton J.....15 W. Franklin St. (10)
Mills, Fred E.....Deaconess Hospital (10)
Mino, Robert A.....723 Mary St. (10)
Mitchell, John B.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Moulton, Lillian G.....1 N. Barker (12)
Muelchi, Adeline F.....518 Hulman Bldg. (8)
Mullican, William S., Jr.....715 First Ave. (10)
Murphy, Edward U.....901 Hulman Bldg. (8)

N

Nenneker, Henry (S)..1912 Harmony Way (12)
Newnum, Raymond L.....3700 Bellemeade (15)
Newsome, Cola K.....415 E. Mulberry (13)
Newton, Roger E.....Mead Johnson & Co., 939 Bond St., Mid-Town Center (8)
Nicholson, Raymond W.....3700 Bellemeade (15)
Niedermayer, Alfred J. 960 Washington Ave. (13)
Nonte, Leo R.....715 First Ave. (10)

O

Oswald, Robert H.....126 S. E. Seventh St. (8)

P

Pastor, Julius W.....3700 Washington Ave. (15)
Pavlick, Theodore J.....908 Hulman Bldg. (8)
Pemberton, Jack J.....319 N. St. Joseph Ave. (12)
Porro, Francis W.....3700 Washington Ave. (15)
Present, Julian D.....3700 Bellemeade (15)
Price, Shirley G.....420 Cherry St. (13)
Pugh, Willis L.....715 First Ave. (10)

R

Radcliff, Forest F., Jr.....3700 Bellemeade (15)
Ratcliffe, Albert W.....P. O. Box 624
Reich, Clarence E.....1209 N. Fulton (10)
Rietman, H. Jerome 19 Chandler, off Riverside (13)
Ritchie, William D.....555 Herndon Dr. (11)
Ritz, Albert S.....3700 Bellemeade (15)
Rosato, Edward J.....3700 Bellemeade (15)
Rosenblatt, Bernard B.....709 Hulman Bldg. (8)
Royster, George M. (S) 401 Citizens Nat'l. Bank Bldg. (8)
Royster, Robert A. 401 Citizens Nat'l. Bank Bldg. (8)
Rudolph, Kenneth J.....3700 Bellemeade (15)
Rupper, Warren R...R. R. 3, Box 159, Heckel Rd.
Rusche, Henry J.....313 W. Iowa (10)
Russell, Richard H...3700 Washington Ave. (15)

S

Schimmelpfennig, Robert W. 1013 Parrett St. (13)
Schirmer, Robert H.....1118 W. Franklin St. (10)
Schneider, Charles P...2211 W. Franklin St. (12)
Schriefer, Victor V.....1120 N. Main St. (11)
Sheehan, E. Gregg.....420 Cherry St. (13)
Shively, Wyant J.....3700 Washington Ave. (15)
Siegel, Lyle P.....500 Oriole Dr. (15)
Sims, Larry W.....3700 Bellemeade (15)
Sinn, Charles M.....715 First Ave. (10)
Slaughter, Howard C.....908 Hulman Bldg. (8)
Slaughter, John C., Jr.....3700 Bellemeade (15)
Slaughter, Owen L.....3700 Bellemeade (15)
Smith, Roy M., Jr.....1307 Stringtown Rd. (11)
Snively, William D., Jr.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Sprecher, Herman C.....517 Sycamore St. (8)
Springstun, Walter R.....715 First Ave. (10)
Stallings, Hugh A.....3700 Bellemeade (15)
Steele, Paul W.....1218B Lincoln Ave. (14)
Sterne, John H.....3700 Bellemeade (15)
Stewart, L. Ray.....852 S. Alvord Blvd. (14)
Stork, Urban F. D.....420 Cherry St. (13)
Strueh, Paul E.....220 S. E. Seventh St. (13)
Swan, Robert E.....420 Cherry St. (13)

T

Tager, Stephen N.....3700 Bellemeade (15)
Tilden, Margaret H.....15 Linden St. (13)
Tisserand, John B., Jr.....3700 Bellemeade (15)
Tuholski, James M.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Turner, Isabel B...Evansville State Hospital (2)
Tweedall, Daniel C.....715 First Ave. (10)

U-V

Venables, Albert J.....600 Mary St. (10)
Viehe, Robert W. (S)....618 S. Willow Rd. (14)
Vincent, William A.....420 Cherry St. (13)
Visher, John W. (S) 805 Old National Bank Bldg. (10)
VonderHaar, Thomas E.....715 First Ave. (10)

W

Walter, Paul A. F., III.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Walter, Robert F.....1514 S. Kentucky Ave. (14)
Warner, Charles L.....420 Cherry St. (13)
Weber, Edgar H.....123 S. E. Second St. (8)
Weiss, Henry G. (S)....1014 E. Powell Ave. (14)
Welborn, Mell B.....420 Cherry St. (13)
Westerman, Richard L.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Wilhelmus, C. Kenneth..115 S. E. Seventh St. (8)
Wilhelmus, Gilbert M...1023 Washington Ave. (14)
Willis, Charles F.....1100 S. Bedford Ave. (13)
Willison, George W.....3700 Bellemeade (15)
Wilson, David.....615 Willow (14)
Wilson, John D.....3700 Bellemeade (15)
Wilson, Ralph.....517 Mary St. (10)
Woodall, Robert L.....3700 Bellemeade (15)
Woodson, Dan E.....414 S. Kelsey Ave. (14)
Woodward, Ben E.....420 Cherry St. (13)
Wynn, Justice F. (S).....905 Hulman Bldg. (8)

X-Y-Z

Young, C. Curtis, Jr.....126 S. E. Seventh St. (8)
Zeier, Francis G.....420 Cherry St. (13)
Zimmerman, Harold.....6 S. E. Second St. (8)
Ziss, Robert C.....216 S. E. Riverside (13)
Zwickel, Ralph E.....906 Hulman Bldg. (8)

Boyd, Stella N.....R. R. 2, Oakland City (47560)
Ehrich, William S. (S)....Manning, So. Carolina (29102)
Newman, Alvin E. (S) 2937 Coral Shores Dr., Ft. Lauderdale, Fla. (33306)

VERMILLION COUNTY

(See Parke-Vermillion)

VIGO COUNTY

Loving, Jury B.....New Goshen (47863)
McIntosh, Wilbert.....Riley (47871)
Jett, Clyde W.....Seelyville (47878)

Terre Haute

(*Zip Code* 478 *plus zone number*).

A

Anderson, Walter C.....2235 Wabash Ave. (07)
Ault, Roy J.....3050 Poplar St. (03)

B

Bannon, William G.
500 Rose Dispensary Bldg. (08)
Blum, Leon L.....1505 N. Seventh St. (08)
Bopp, Henry W., Jr.....221 S. Sixth St. (01)
Bopp, James.....Union Hospital (08)
Boyd, H. Clark.....221 S. Sixth St. (01)
Bristol, Henry M. S.....1024 S. Sixth St. (07)
Bronson, Paul J.....3050 Poplar St. (03)
Brown, Robert R.....221 S. Sixth St. (01)
Burkle, Robert J.....3050 Poplar St. (03)

C

CaJacob, Melville E.....1000 S. Sixth St. (07)
Caldwell, Milton V.....416 Tribune Bldg. (01)
Cavins, Alexander W.....221 S. Sixth St. (01)
Chau, Andrew Y. S.....405 S. Sixth St. (01)
Combs, Stuart R.....3050 Poplar St. (03)
Congleton, George C. (S)
308 Merchants National Bank Bldg. (01)
Conklin, James O..310 Rose Dispensary Bldg. (08)
Connerley, Marion L.....107 S. Seventh St. (01)
Conway, Thomas J.....221 S. Sixth St. (01)
Cristee, James W..500 Rose Dispensary Bldg. (08)
Crockett, Wayne A.
500 Rose Dispensary Bldg. (08)

D

Davis, Paul E.....1233 Maple Ave. (04)
Dierdorf, Fred W.....Union Hospital (08)
Dyer, George W.....2235 Wabash Ave. (07)

E

Edwards, Henry G..6 Rose Dispensary Bldg. (08)
Ensey, Philip L...Indiana State University (09)

F

Freed, John E., Jr.....1030 S. Sixth St. (07)

G

Gerrish, Donald A.....5206 Clinton Road (05)
Goodman, Hubert T.
410 Rose Dispensary Bldg. (08)
Gossom, Donn R.....825 N. Third St. (07)

H

Harkness, Robert G. (S)
301 Rose Dispensary Bldg. (08)
Haslem, Ezra R..401 Rose Dispensary Bldg. (08)
Haslem, John R.....221 S. Sixth St. (01)
Hetherington, John A.
414 Merchants Bank Bldg. (01)
Hogan, Thomas W.....627 Cherry St. (01)
Hoover, Dewey A.....1218½ Wabash Ave. (01)
Humphrey, Paul E.....1235 Ohio Blvd. (07)
Hunt, Edgar J. (S).....R. R. 1 (02)

J

Johnson, Edward M.....221 S. Sixth St. (01)
Johnson, Paul D., Jr.....822 N. 15th St. (07)
Justin, Renate G.....901 S. 25th St. (03)

K

Kabel, Robert N.....3050 Poplar St. (03)
Krieble, William W.....221 S. Sixth St. (01)
Kunkler, Arnold W.....1700 N. Seventh St. (04)
Kunkler, Joseph (S).....14 S. Fifth St. (01)
Kunkler, William C. (S)
212 Merchants Nat'l. Bank Bldg. (01)

L

LaBier, Clarence R., Jr.....325 Ohio St. (01)
Lancet, Robert O.....2101 Wabash Ave. (07)
Lee, James.....465 S. 25th St. (03)
Lenyo, Ludimere.....221 S. Sixth St. (01)
Lo, Loretta S. Y.....405 S. Sixth St. (07)
Loewenstein, Werner L..1537 S. Seventh St. (02)
Luckett, Coen L. (S)..211 Fairbanks Bldg. (01)
Lyons, L. Mason.....59 S. 18th St. (07)

M

McAleese, George B.....1030 S. Sixth St. (07)
McBride, Noel S.
407 Merchants Nat'l. Bank Bldg. (01)
McCrea, Fred R.....221 S. Sixth St. (01)
McEwen, James W.....670 Cherry St. (01)
McLaughlin, Gordon C.....1644 S. 25th St. (03)
Malone, Leander A.....416 Tribune Bldg. (01)
Mankin, William J.....402 Tribune Bldg. (01)
Mason, Lester M.
314 Merchants Nat'l. Bank Bldg. (01)
Mattox, Don M.....1700 N. Seventh St. (04)
Meissel, Robert L.....920 N. 19th St. (07)
Miklozek, John E.....1461 S. Seventh St. (02)
Milleson, Ann L. M.....826 S. Center St. (07)
Mitchell, John R.....221 S. Sixth St. (01)
Moore, Gene.....903 S. 25th St. (03)
Musselman, Glen G.....1021 S. Sixth St. (07)

N

Nay, Ernest O. (S).....221 S. Sixth St. (01)
Neudorff, Louis G.....221 S. Sixth St. (01)

P

Pearce, Roy V.....1440 S. 25th St. (03)
Peterson, Deward D.....221 S. Sixth St. (01)
Pu, Pin H.....1021 S. Sixth St. (07)

R

Reed, Robert C.....Union Hospital (08)
Reynolds, Richard J.....2250 Wabash Ave. (07)
Richart, James V..414 Rose Dispensary Bldg. (08)
Riggs, Floyd C. (S).....2216 Wabash Ave. (07)
Rogers, R. Shirrell.....1101 S. Sixth St. (02)
Rourke, Robert F.....1724 N. Seventh St. (04)
Rubin, Milton M.....221 S. 19th St. (07)

S

Sayers, Frank E. (S)....436 Bluebird Dr. (03)
Scherb, Burton E.....104 N. Seventh St. (01)
Schott, Edward J. (S).....653 Oak St. (07)
Schumaker, Robert A.....3050 Poplar St. (03)
Scully, William E.....221 S. Sixth St. (01)
Shanklin, Vernon A. (S).672½ Wabash Ave. (01)
Showalter, John R.....1223 Maple Ave. (04)
Siebenmorgen, Paul.....1024 S. Sixth St. (07)
Silverman, Norman M.....1024 S. Sixth St. (07)
Sison, Vicente G.....3050 Poplar St. (03)
Speas, Robert C.....402 Tribune Bldg. (01)
Stewart, Walter E. (S)..402 Tribune Bldg. (01)
Stoelting, J. Lewis....1724 N. Seventh St. (04)
Strecker, William L.....1024 S. Sixth St. (07)
Sullivan, John M.....1712 Franklin St. (02)

T-U-V

Topping, Malachi C.....3050 Poplar St. (03)
Vance, William C...Indiana State University (09)
Veach, William L.....1235 Ohio St. (07)
Voges, Edward C.....702 College Ave. (02)

W

Walden, Heinz J.....213 Gilbert Ave. (07)
Weber, Joseph G. S.....723 Wabash Ave. (01)
Weinbaum, Jack G.....1505 N. Seventh St. (07)
West, Roger F.....221 S. Sixth St. (01)
Wheeler, Byron C.....3050 Poplar St. (03)
Wilson, Fred L.....1501 S. Third St. (02)

X-Y-Z

Zwerner, Paul F.....2100 N. 12th St. (07)

Hausner, Murray M.....Inter-Community Hosp., 275 W. College St., Covina, Calif. (91724)

WABASH COUNTY

Poehler, Fred C.....La Fontaine (46940)

North Manchester
(*Zip Code* 46962)

Balsbaugh, George K.....107 W. Seventh St.
Bunker, Ladoska Z.....201 N. Mill St.

Cook, Charles E.....114 W. Main St.
Eiler, Paul A.....1104 N. Wayne St.
Silvers, Michael.....1104 N. Wayne St.
Smith, Lloyd H.....1104 N. Wayne St.

Wabash

(*Zip Code* 46992)

Boaz, William D.....645 N. Spring St.
Dannacher, William D.....400 Ash St.
Dragoo, John R.....400 Ash St.
Dunham, Henry H.....1025 Manchester
Dziabis, Marvin D.....Wabash County Hospital
Elward, Carl J.....1025 Manchester
Gatzimos, Christos D....Wabash County Hospital
Hanneken, Vincent J.....119 Highland Dr.
LaSalle, Richard M.....645 N. Spring St.
LaSalle, Robert M., Jr.....645 N. Spring St.
LaSalle, Robert M., Sr.....R. R. #4
Mernitz, Roland B., Jr.....400 Ash St.
Mills, John F.....400 Ash St.
Pearson, William E.....290 N. Wabash
Rauh, Robert A.....400 Ash St.
Smyrniotis, Frank.....645 N. Spring St.
Steffen, Julius T.....443 N. Wabash
Stoops, Jean T.....400 Ash St.
Zydlo, Stanley M.....1025 Manchester

Kidd, James G. (S).....720 West Racine St., Apt. B, Jefferson, Wis. (53549)

WARREN COUNTY

(See Fountain-Warren)

WARRICK COUNTY

Boonville

(*Zip Code* 47601)

Hoover, Peter B.....223 W. Locust St.
Martin, Noel J.....214 S. Second St.
Stover, Wendell C.....125½ S. Second St.
Terry, Robert H.....117 S. Second St.

Dimmett, James D.....Chandler (47610)
Colvin, Robert C.....Newburgh (47630)

WASHINGTON COUNTY

Tower, Thomas K.....Campbellsburg (47108)
Carty, Charles B.....Pekin (47165)

Salem

(*Zip Code* 47167)

Apple, Eddie R.....501 W. Market St.
Coleman, Henry G.....Mitchell Bldg.
Episcopo, Arsenius R.....R. R. #3
Fultz, Roy L.....304 E. Market St.
Huckleberry, Irvin E. (S)....502 W. Mulberry St.

WAYNE-UNION COUNTIES

Hill, Paul G.....Cambridge City (47327)
Kenyon, C. Emil.....Cambridge City (47327)
Barton, Willoughby M.....Centerville (47330)
Hutchison, Donald R.....Fountain City (47341)

Liberty

(*Zip Code* 47353)

Clarkson, Clarence G.....304 E. Union St.
Lewis, James F.....28 E. Union St.
McWilliams, William B. (S).....R. R. 2

Richmond

(*Zip Code* 47374)

Adney, Frank B., Jr.....1015 S. A St.
Ake, Loren.....213 Medical Arts Bldg.
Allen, Robert T.....34 S. Seventh St.
Anderson, Robert C.....Richmond State Hosp.
Ballenger, William E.....309 Medical Arts Bldg.
Blossom, Paul W.....825 S. A St.
Brooks, G. Tanner.....29 S. 12th St.
Buche, Frederick P. (S).....106 S. Seventh St.
Clouse, John F.....307 Medical Arts Bldg.
Coble, Frank H.....51 S. Eighth St.
Cox, Leon T.....1210 E. Main St.
Daggy, James R.....35 S. Eighth St.
Dehner, John R.....Reid Memorial Hospital
Dingle, Paul E.....127 Medical Arts Bldg.
Ebbinghouse, Tom.....98 W. Main St.
Gibson, Alois E.....1250 Chester Blvd.
Guthrie, James R.....1010 S. A St.
Hance, Darwood B.....Reid Memorial Hospital
Harmon, Carl J.....311 Medical Arts Bldg.
Hawk, Edgar A.....616 Garwood Rd.
Hibner, Dan W.....307 Medical Arts Bldg.
Hill, Gladys Marie.....407 Medical Arts Bldg.
Hunt, Gayle J.....425 S. 19th St.
Johnson, George M.....1250 Chester Blvd.
Kime, Charles E.....1201 S. A St.
Klepfer, Jefferson F....Richmond State Hospital
Kreitl, Dorothy R.....Richmond State Hospital
Lee, Glen Ward.....100 N. 15th St.
Ling, John F.....1250 Chester Blvd.
Logan, James Z.....84 S. 14th St.
Loomis, Charles H.....1203 S. A St.
McIlroy, Richard J.....Richmond State Hospital
Mader, John H.....2000 E. Main St.
Malcolm, Russell L.....127 Medical Arts Bldg.
Meredith, Elwood J.....203 Medical Arts Bldg.
Miller, Harold L. .....1250 Chester Blvd.
Millis, Arthur B.....1250 Chester Blvd.
Park, Byron J.....1250 Chester Blvd.
Plasterer, Edward D.....212 S. 16th St.
Porter, George S.....920 Whitewater Blvd.
Ramsdell, Glen A.....1015 S. A Street
Runge, Paul W.....1426 E. Main St.
Sage, Charles V., Jr.....48 S. 11th St.
Schmitt, Robert W.....25 Circle Drive
Sherer, Kenneth E.....1250 Chester Blvd.
Shields. Tom S.....47 S. 11th St.
Short, John A.....409 S.W. I St.
Snyder, Morris C.....810 S. A St.
South, Herman H.....Richmond State Hospital
Spellmeyer, John C.....803 N. A St.
Stepleton, John D.....Reid Memorial Hospital
Stilwell, William R.....2607 South C Place
Sweet, Howard E.....35 E. Eighth St.
Wambo, John M.....16 S.W. 18th St.
Wanninger, Horace (S).....2 N. Eighth St.
Warrick, Francis B.....1426 E. Main St.
Weitemier, Raymond A.....2000 E. Main St.
Wertenberger, Morris D. 779 Greenmount Pike, R. R. 2
Wiland, Olin K.....Reid Memorial Hospital
Wynegar, David E.....Richmond State Hospital
Zore, Joseph J.....1308 North A Street

Shepard, Fred F.....College Corner, Ohio (45003)

WELLS COUNTY

Bluffton

(*Zip Code* 46714)

Boonstra, Charles E.....303 S. Main St.
Bradley, Louis F.....303 S. Main St.
Buckner, Joy F.....116 E. Walnut St.
Caylor, Charles H.....303 S. Main St.
Caylor, Harold D.....303 S. Main St.
Caylor, Truman E.....303 S. Main St.
Collins, Jack T.....303 S. Main St.
Cook, Robert G.....303 S. Main St.
Dorrance, Thomas O.....303 S. Main St.
Eisaman, Jack L.....303 S. Main St.
Gitlin, Max M.....121 E. Market St.
Gitlin, William A.....121 E. Market St.
Graf, Russell E.....303 S. Main St.
Hendeles, Frieda R.....303 S. Main St.
Huebner, Gilbert D.....303 S. Main St.
Huffman, Galen C.....303 S. Main St.
Jackson, Charles E.....303 S. Main St.
Kephart, S. Bruce.....303 S. Main St.
McCaslin, Charles W.....303 S. Main St.
Matzen, Richard N.....303 S. Main St.
Mayock, Peter P.....303 S. Main St.
Meier, Donald W.....303 S. Main St.
Mock, L. Farrell.....303 S. Main St.
Mudrony-Szoke, Jeno B.....303 S. Main St.
Panos, Constantine G.....227 S. Main St.
Phillips, John F.....303 S. Main St.
Pietz, David G.....303 S. Main St.
Pitts, Neal C.....303 S. Main St.
Rusher, Merrill W.....303 S. Main St.
Schaefer, Joseph C.....303 S. Main St.
Shaw, Glenn R.....303 S. Main St.
Sorg, David A.....303 S. Main St.
Steckbeck, Robert L.....303 S. Main St.
Strehler, Don A.....303 S. Main St.
Symon, William E.....303 S. Main St.
Talbert, Pierre C.....303 S. Main St.
Willard, Richard.....R. R. 4
Yoder, Richard P.....303 S. Main St.

Stevens, Adam C.....Kendallville (46755)
Gingerick, Charles M.....Liberty Center (46766)
Kinzer, LeRoy D.....Markle (46770)
Miller, Gerald L.....Markle (46770)
Hardin, Wayne E.....Ossian (46777)

Rudy, Donald B.
P. O. Mnene, via Belingwe, Rhodesia, S. Africa

WHITE COUNTY

Galbreth, Jesse P. (S).....Burnettsville (47926)
McClure, Stanley E.....Monon (47959)

Monticello

(*Zip Code* 47960)

Beck, David C.....135 S. Illinois St.
Dickerson, W. Martin.....1114 O'Connor Blvd.
Fields, Max L.....Western Heights
Hibner, Nolan A.....222 S. Main St.
Jehanyar, M. Ali.....116 N. Illinois St.
Morris, Warren V.....115 W. Marion St.

Baynes, Frank L.....Wolcott (47995)
Forbes, Violet Crabbe.....Wolcott (47995)

WHITLEY COUNTY

Hershey, Ernest A. (S).....Churubusco (46723)
Minick, Linus J.....Churubusco (46723)

Columbia City

(*Zip Code* 46725)

Hamilton, Thomas.....115 S. Main St.
Heritier, C. Jules.....116 S. Chauncey
Langohr, John L.....215 E. Van Buren St.
Lehmberg, Otto F. C.....118 E. Van Buren St.
Niccum, Warren L.....215 E. Van Buren St.
Reid, Donald B.....2 Hallmark Square
Roth, James R.....323 N. Chauncey
Thompson, Frank M.....510 N. Main St.
Vogel, John L.....215 E. Van Buren St.
Wait, Jerome H.....115 S. Main St.
Wilson, John.....122 N. Main St.

Stalter, Gaylord W.....North Webster (46555)
Mishler, Joe B.....P. O. Box 276, Pierceton (46562)
Yoder, Dewey D.....R. R. #1, Pierceton (46562)
Huffman, Verlin P.
201 N. State St., South Whitley (46787)

WOMAN'S AUXILIARY
to the
INDIANA STATE MEDICAL ASSOCIATION

OFFICERS: 1967-68

PRESIDENT	Mrs. John W. Deever	6801 S. East St.	Indianapolis
PRESIDENT-ELECT	Mrs. S. Bruce Kephart	Box 12	Bluffton
IMMEDIATE PAST-PRESIDENT	Mrs. Alfred B. Scales	Holland Rd.	Huntingburg
FIRST VICE-PRESIDENT	Mrs. Paul A. Clouse	5801 Newburgh Rd.	Evansville
NORTHERN VICE-PRESIDENT	Mrs. Russell W. Kretsch	7214 Hohman Ave.	Hammond
CENTRAL VICE-PRESIDENT	Mrs. Milton V. Caldwell	R. R. 7, Box 449	Terre Haute
SOUTHERN VICE-PRESIDENT	Mrs. Gilbert Himebaugh	408 S. Alford Blvd.	Evansville
RECORDING SECRETARY	Mrs. Stephen D. Smith	308 N. Washington St.	Knightstown
TREASURER	Mrs. Otis R. Bowen	304 N. Center St.	Bremen
CORRESPONDING SECRETARY	Mrs. Morgan E. Greene	2014 Winchester Dr.	Indianapolis
FINANCE SECRETARY	Mrs. H. Carter Dunstone	2525 Paulding Rd.	Fort Wayne
HISTORIAN	Mrs. Edward L. Rigley	1704 Ridgedale Rd.	South Bend
PARLIAMENTARIAN	Mrs. Frank Gastineau	2926 Lakeshore Dr., Apt. A	Indianapolis

COMMITTEE CHAIRMEN

AMA-ERF (CHAIRMAN)	Mrs. Edward M. Johnson	313 Terre Vista Dr.	Terre Haute
AMA-ERF (TREASURER)	Mrs. C. Herbert Spencer	2108 Paulding Rd.	Ft. Wayne
BYLAWS	Mrs. Jack Shields	603 W. Spring St.	Brownstown
COMMUNITY SERVICE	Mrs. John M. Records	1138 Orchard Lane	Franklin
DISASTER PREPAREDNESS	Mrs. A. Alan Fischer	2515 Knollwood Dr.	Indianapolis
EDITORIAL	Mrs. Frank Green	516 N. Morgan St.	Rushville
HEALTH CAREERS	Mrs. William Garner, Jr.	1510 Sunset Dr.	New Albany
LEGISLATION	Mrs. Dwight W. Schuster	4503 Washington Blvd.	Indianapolis
INTERNATIONAL HEALTH ACTIVITIES	Mrs. Russell J. Morrical	415 Highland St.	Logansport
MEDICAL CARE INSURANCE	Mrs. Halleck S. Knotts	2740 Washington St.	Columbus
MEMBERSHIP	Mrs. Paul A. Clouse	5801 Newburgh Rd.	Evansville
MENTAL HEALTH	Mrs. Richard G. Horswell	1629 E. Jackson Blvd.	Elkhart
ORGANIZATION	Mrs. S. Bruce Kephart	Box 12	Bluffton
PROGRAM	Mrs. Nicholas W. Hatfield	5851 E. 54th Pl.	Indianapolis
PUBLICITY	Mrs. Stanley M. Chernish	4403 Radnor Rd.	Indianapolis
RURAL HEALTH	Mrs. Francis Gootee	R. R. 1	Jasper
LIAISON OFFICER to the Indiana Chapter of W.A.S.A.M.A.	Mrs. Herbert L. Egbert	419 W. 63rd St.	Indianapolis
LIAISON OFFICER TO I-HOPE	Mrs. Thomas W. Johnson	351 W. 63rd St.	Indianapolis
1967 ISMA CONVENTION CHAIRMAN	Mrs. Thomas W. Johnson	351 W. 63rd St.	Indianapolis
1968 CONVENTION CHAIRMAN, HOUSE OF DELEGATES	Mrs. William M. Matthews	5215 Nob Lane	Indianapolis

MEMBERSHIP ROSTER—BY COUNTIES

ADAMS COUNTY

Berne

(*Zip Code* 46711)

Boze, Mrs. Robert L.....255 Dearborn St.
Dester, Mrs. H. E.....104 E. Water
Graber, Mrs. Martin.....265 W. Water

Decatur

(*Zip Code* 46733)

Burk, Mrs. James M.....221 S. 3rd St.
Carroll, Mrs. John C.....R. R. 5
Doan, Mrs. John.....522 Jefferson
Freeby, Mrs. C. William.....R. R. 1
Girod, Mrs. Arthur A.....R. R. 6
Parrish, Mrs. Richard K.....242 S. 2nd St.
Rich, Mrs. Norval S.....R. R. 4
Zwick, Mrs. Harold F.....104 E. Rugg

ALLEN COUNTY

Bluffton

(*Zip Code* 46714)

Brickley, Mrs. Harry D.....401 S. Main St.
Buckner, Mrs. Winifred.....116 E. Walnut
Hamilton, Mrs. O. G.....203 E. Central Dr.

Fort Wayne

(*Zip Code* 46805 *unless otherwise indicated.*)

A

Acker, Mrs. Herbert.....6314 Donna Dr. (09)
Adams, Mrs. E. Wade....1902 Forest Park Blvd.
Ahlbrand, Mrs. Roland C.....1242 Northlawn
Aiken, Mrs. Arthur F.....8331 Waterswolde Lane
Aiken, Mrs. Nevin E.....5540 Leo Rd.
Anderson, Mrs. Garland.....1241 Bethany Lane
Andrew, Mrs. Jerald.....401 W. Sherwood Terrace (07)

Arata, Mrs. James.....126 Timber Lane
Arata, Mrs. Justin E.....224 Ludwig Rd.
Ashman, Mrs. William C....1018 Kinnaird (07)
Aust, Mrs. Charles H.
7137 Roseann Parkway (04)

B

Ball, Mrs. John R.....4112 S. Harrison (07)
Baltes, Mrs. Joseph H.....1309 Sunset Dr. (07)
Barch, Mrs. John W.....4921 Desoto Dr. (05)
Bash, Mrs. Wallace E.....1201 Korte Lane (07)
Beams, Mrs. Ralph.....3710 Wawonaissa (11)
Beierlein, Mrs. Karl M....2716 Butler Road (08)
Beights, Mrs. Raymond..4505 Fairlawn Pass (06)
Bergendahl, Mrs. Emil.....1202 Illsley (07)
Berghoff, Mrs. J. R.....3736 Plymouth Rd.
Beutler, Mrs. Theodore
3505 S. Washington Rd. (04)
Bierman, Mrs. Gilbert.....1216 W. Wayne (02)
Billingsley, Mrs. John.....4720 Crestwood (07)
Bixler, Mrs. J. A.....4310 Vance Ave.
Blichert, Mrs. Peter A....449 W. Sherwood (07)
Bolman, Mrs. R. Morton....5405 S. Wayne (07)
Borders, Mrs. Theodore R.....1802 Nevada St.
Bossard, Mrs. John W.....1611 Alabama
Bower, Mrs. Richard E.
3609 Portage Blvd., Apt. #5 (04)
Bowers, Mrs. Geo. W.....7916 Covington (04)
Brandt, Mrs. William.....3535 Kirkland
Braunlin, Mrs. Robert J.....3423 Kirkland Lane
Bridges, Mrs. W. Lloyd.....207 Southridge Rd.
Bromley, Mrs. Luman W.
1225 W. Sherwood Ter. (07)
Brosius, Mrs. Robert H.....3302 Garland
Brown, Mrs. Frederic W....1813 Woodmoor (04)
Brucker, Mrs. Perry A.....2933 Kingsley
Bryan, Mrs. Franklin A.....3006 Devon Dr.
Buckner, Mrs. George D....4327 Hampshire Dr.
Burkhart, Mrs. Charles A.....3517 Rockwood Dr.

C

Carlo, Mrs. Ernest.....5205 Indiana (07)
Chambers, Mrs. Alan....2401 Indian Village (07)
Clark, Mrs. Wm. R.....4002 S. Harrison (07)
Cochran, Mrs. Harry A., Jr.
420 W. Sherwood Ter. (07)
Connelly, Mrs. Jerry.....4615 Willard Dr.
Connelly, Mrs. Richard D.....3016 Kingsley Dr.
Cooney, Mrs. Charles J.
2620 Covington Club Court (04)
Cottrell, Mrs. Robert F...5125 Worthman Ct. (07)

D

Datzman, Mrs. Richard....5402 Bluffton Rd. (07)
Donesa, Mrs. Antonio B.....4023 Spanish Trail
Dunstone, Mrs. H. Carter
2525 Paulding Rd. (01)

E

Eberly, Mrs. Karl C.....1240 W. Rudisill (07)
Emenhiser, Mrs. John L.....1407 Pinehurst Dr.
Engleman, Mrs. Reinhold...7210 Blackhawk Dr.
Epps, Mrs. James.....2120 Hobson Rd., Apt. 111A

F

Farquhar, Mrs. John S.....5206 Indiana (07)
Ferguson, Mrs. Arthur N...328 W. Sherwood (07)
Flaherty, Mrs. Robert....1835 Forest Park Blvd.
Foy, Mrs. Thomas.....2618 Glenwood Ave.
Frankhouser, Mrs. Chas. M.
7245 Winchester Rd. (07)
Fullam, Mrs. Richard.....4159 Woodstock

G

Gastineau, Mrs. David C.....8203 Westridge Rd.
Gerding, Mrs. William J...1721 Forest Park Blvd.
Giffin, Mrs. Charles.....3222 Chancellor
Glassley, Mrs. Stephen.....6950 Stellhorn Rd.
Glock, Mrs. Maurice E...1502 Hawthorne Rd. (04)
Glock, Mrs. Wayne R.....Tonkel Rd., R. R. 2
Goebel, Mrs. Carl W.....4102 S. Harrison (07)
Graham, Mrs. George M...1126 W. Rudisill (07)
Graham, Mrs. James C.....2835 Devon Dr.
Greenlee, Mrs. Robert L.....3344 Sanibel Dr.
Greist, Mrs. Walter D.....4809 Arlington (07)
Griffith, Mrs. Harold R...1913 Forest Park Blvd.

H

Hackett, Mrs. Walter G..5220 Crandon Lane (04)
Haffner, Mrs. Herman G..3606 Mulberry Rd. (04)
Halaby, Mrs. Fouad.....9487 Crestridge (04)
Haley, Mrs. Alvin J.....3720 Stellhorn Rd.
Haller, Mrs. Richard C.....2525 Otsego
Hamilton, Mrs. Emory D.....2405 Florida Dr.
Hamilton, Mrs. George.....4531 Highwood Dr.
Hasewinkle, Mrs. August M...3544 Kirkland Lane
Hastings, Mrs. Warren C.....1822 Kensington Rd.
Hattendorf, Mrs. A. Paul..4041 Old Mill Rd. (07)
Havens, Mrs. Russell E.....3721 Inwood
Hershberger, Mrs. Philip G.
5525 Covington Rd. (04)
Hickman, Mrs. Donald M.....1815 Kensington Rd.
Hillery, Mrs. Robert.....3513 Kirkland Lane
Hipskind, Mrs. Richard E...1416 Woodmoor (04)
Hoffman, Mrs. Arthur F...3619 Harris Rd. (08)
Holsinger, Mrs. Robert E.
3466 S. Washington Rd. (04)
Hoover, Mrs. Joseph.....415 Blake Dr. (08)
Howe, Mrs. Fordyce L.....2540 Springfield
Humphreys, Mrs. John L.
3701 S. Washington Rd. (04)

I & J

Irmscher, Mrs. Geo. W.....2024 Florida Dr.
Isenogle, Mrs. Kenneth.....4201 Brooklawn Dr.
Jackson, Mrs. John F.....4922 Indiana (07)
Johnston, Mrs. Richard.....2533 Bellevue Dr.
Jontz, Mrs. Joseph.....514 Shady Hurst Dr.
Jontz, Mrs. Richard L.....3705 Marigold Dr.
Juergens, Mrs. Richhard.....8233 Parkridge

K

Karol, Mrs. Herbert J.....1725 Ardmore (04)
Kaufman, Mrs. Julian R...5405 Old Mill Rd. (07)
Keck, Mrs. Carleton A.....4633 Crestwood (07)
Kent, Mrs. Richard N.....2717 East Dr.
Keyes, Mrs. Robert C.....1226 Illsley (07)
Kidder, Mrs. Orva T.....Lima Rd. (08)
Kilgore, Mrs. Byron.....3110 Glencairn Dr.
Kimbrough, Mrs. Robert....4601 Beaver Ave. (07)
Kleifgen, Mrs. Wm. A.....4602 Tacoma (07)
Klooze, Mrs. Kenneth W.....723 W. Packard (07)
Knight, Mrs. Lewis W.....3502 Glencairn Dr.
Krueger, Mrs. John.....4418 Bradwood Terrace

L

Ladig, Mrs. Donald S.....2720 Fairfield (07)
Laker, Mrs. Gene C.....4635 Old Mill Rd. (07)
Laker, Mrs. Richard J.....1301 Sheridan Ct. (07)
Lampe, Mrs. Elfred H...4255 Hartman Rd. (07)
Laycock, Mrs. Richard.....5019 Stellhorn Rd.
Lee, Mrs. John W.....3336 Rockwood Dr.
Lenk, Mrs. George G.....5507 E. State St.
Logan, Mrs. Richard S.....5225 Vance
Lohman, Mrs. Robert M...1320 Westover Rd. (07)
Lorman, Mrs. James G.....4926 Midlothian
Loudermilk, Mrs. Jack L.....3032 Glencairn Dr.
Luckey, Mrs. James E.....3703 Bramble Crest Dr.

M

McBride, Mrs. W. O.....2121 Engle Rd. (07)
McCallister, Mrs. John W...4215 Drury Lane (07)
McCoy, Mrs. Roy R.....4101 S. Harrison (07)
McDowell, Mrs. George A...2322 Forest Park Blvd.
McEachern, Mrs. Cecil....4242 Old Mill Rd. (07)
McKeeman, Mrs Donald H.....1615 Ardmore (04)
Mann, Mrs. R. E.....4035 Cadena Lane
Manning, Mrs. George....4115 Indiana Ave. (07)
Marsh, Mrs. M. Frederick..3721 Central Dr. (06)
Marshall, Mrs. Caesar L.....438 E. Lewis (02)

Mastrangelo, Mrs. Michael J.
2718 Priscilla Lane (06)
Meyer, Mrs. Theo. O.....3728 Kirkwood
Michaelis, Mrs. Stephen C...1255 Korte Lane (07)
Miller, Mrs. Carl G.....457 Oakdale Dr. (07)
Miller, Mrs. Don E.....3329 Argyle Dr. (06)
Miller, Mrs. Edward D.....2615 East Drive
Miller, Mrs. H. Paul.....6408 S. Calhoun (07)
Miller, Mrs. Mahlon F.....1115 Illsley (07)
Miller, Mrs. Orval J.....1810 Kensington
Miller, Mrs. Richard.....5516 Indiana (07)
Miller, Mrs. Wm. J.....2620 Capitol (06)
Moats, Mrs. Carl F...3210 N. Washington Rd. (04)
Moeller, Mrs. Victor C.....4723 St. Joe Center Rd.
Moravec, Mrs. Arthur....4711 Old Mill Rd. (07)
Morey, Mrs. Edwin.....709 Kinnaird (07)
Morgan, Mrs. Milton M.....8214 Park Ridge Dr.
Mortenson, Mrs. Leland J.
1310 W. Foster Pkwy. (07)
Mueller, Mrs. Lawrence W.
3423 S. Washington Rd. (04)

N-O

Nill, Mrs. John H.....5316 South Wayne (07)
Nolan, Mrs. Gerald R.
2631 Covington Club Ct. (01)
O'Brian, Mrs. John F.....1215 N. Anthony Blvd.
O'Rourke, Mrs. Carroll..9211 Covington Rd. (04)

P

Painter, Mrs. Donald S....R. R. 1, Southridge Rd.
Parker, Mrs. C. B.....2215 Paulding Rd. (01)
Parrot, Mrs. Donald J.....4926 Chaucer (01)
Patterson, Mrs. Jack W.....8914 Maravilla Dr.
Perrin, Mrs. Kermit F.....2828 Lake Ave.
Pickett, Mrs. Merle E.....4509 Trierwood
Popp, Mrs. Milton F.....3148 Parnell Ave.
Powell, Mrs. M. Jack..7412 Ridge Knoll Rd. (04)
Priddy, Mrs. Marvin.....3902 Bonita Place

R

Rank, Mrs. William B.
3737 S. Washington Rd. (04)
Reed, Mrs. John D.....3940 Dalewood Dr.
Richards, Mrs. Alan D.....3730 Meda Pass (07)
Rissing, Mrs. Walter J.....3200 Irvington
Roser, Mrs. Arthur J.....5576 Covington Rd. (04)
Rossiter, Mrs. Dudley L....724 Oakdale Dr. (04)
Rothberg, Mrs. Maurice..4319 Hartman Rd. (07)
Rousseau, Mrs. John W.....3018 Devon Dr.

S

Salon, Mrs. Harry W...4017 Hiawatha Blvd. (07)
Salon, Mrs. Joel.....4935 Old Mill Rd. (07)
Salon, Mrs. Nathan L...7939 Scottwood Court (04)
Sarver, Mrs. Francis E.....4629 Tacoma (07)
Savage, Mrs. Arthur R.....R. R. 1, Southridge Rd.
Schlademan, Mrs. Karl R...5231 Old Mill Rd. (07)
Schleinkofer, Mrs. Robert.....705 Caribe Blvd.
Schloss, Mrs. Robert
414 W. Sherwood Terrace (07)
Schmidt, Mrs. Eugene E.....1119 Maxine Dr. (07)
Schmoll, Mrs. Robert J.....5214 Woodhurst (07)
Schneider, Mrs. Louis A.
1351 W. Sherwood Tr. (07)
Schoen, Mrs. Frederic L.....5128 S. Wayne (07)
Schoenhals, Mrs. Charles E.....2818 Inwood
Schubert, Mrs. Jerome C.
4725 Wellington Drive (06)
Scudder, Mrs. James.....1619 Forest Park Blvd.
Senseny, Mrs. Eugene F..3112 Beaver Ave. (07)
Shaw, Mrs. James E...3932 Rosewood Drive (04)
Shinabery, Mrs. Lawerence..1850 Broadway (04)
Shugart, Mrs. Robert R.
4206 N. Washington Rd. (04)
SiDell, Mrs. James.....3912 Bonita Pl.
Sirlin, Mrs. E. M.....2615 Trier Rd.
Smith, Mrs. C. Curtis.....4332 Charter Lane
Smith, Mrs. Philip L.....5416 South Wayne (07)
Snyderman, Mrs. Sanford C.
3222 N. Wash. Rd. (04)
Somers, Mrs. G. H.....1253 W. Rudisill (07)
Spencer, Mrs. C. Herbert
2106 Paulding Rd. (01)
Stanley, Mrs. Robert G.
2807 Club Terrace Rd. (04)
Stauffer, Mrs. Richard C.....3924 Spanish Trail
Steigmeyer, Mrs. David J.....6809 Woodcrest
Stellner, Mrs. Howard A..3323 Butler Court (08)
Stier, Mrs. Paul..R. R. 6, 13120 Ravine Trail (04)
Stucky, Mrs. Jerry L.....4167 Woodstock Ave.
Sullivan, Mrs. Robert E.....4706 Highwood

T

Tennant, Mrs. David L.....3908 Spanish Trail
Terrill, Mrs. Richard.....4727 Old Mill Rd. (07)
Tomusk, Mrs. August N.....2315 Springfield
Trier, Mrs. Herbert P.....1618 Forest Park Blvd.

U-V

Ungemach, Mrs. Willo F.....3929 Wenonah (07)
Vogel, Mrs. Lloyd A.....5626 Dartmouth Dr.

W

Wade, Mrs. Reynolds W., Jr...4105 Dalewood Dr.
Walker, Mrs. Floyd.....1202 Forest Ave.
Weber, Mrs. John R.....5313 S. Wayne
Wick, Mrs. Alfred A.....2320 Springfield Ave.
Wilkins, Mrs. Robert W.....914 Prange Dr. (07)
Wilson, Mrs. Leslie.....4864 Reed Rd.
Wilson, Mrs. Roland B.....4100 Abbott (06)
Wright, Mrs. William C.....1834 Pemberton Dr.
Wyatt, Mrs. James L., Jr...2934 Grandview (04)

Z

Zehr, Mrs. Noah.....301 W. Creighton (07)
Zweig, Mrs. Elmer S.....2015 Pemberton

New Haven

(*Zip Code* 46774)

Dahling, Mrs. C. Wallace..Carefree Farms, R. R. 2
Dahling, Mrs. Fred W.....1229 Rose Ave.
Hoetzer, Mrs. Eldore M.....Doyle Rd.
Sidell, Mrs. James.....1228 Powers
Stumpf, Mrs. Edwin E.....1316 Werling Rd.

Emme, Mrs. Richard W...R. R. 2, Grabill (46741)
Mackel, Mrs. Frederick
R. R. 1, Huntertown (46748)
Harless, Mrs. O. Fred.....Monroeville (46773)

BARTHOLOMEW-BROWN COUNTIES

(*Zip Code* 47201)

Columbus

Able, Mrs. Walter.....2630 19th St.
Adler, Mrs. David L.....4224 N. Riverside Dr.
Andrews, Mrs. Fred B.....2813 DeSoto Way
Beggs, Mrs. Lowell F.....2733 Riverside Dr.
Daugherty, Mrs. Forest D...R. R. 1, Indian Hills
Davis, Mrs. Marvin R.....2300 N. Washington St.
Dugan, Mrs. Thomas.....2651 18th St.
Echsner, Mrs. Herman J.....300 Tipton Lane
Fisher, Mrs. Walter S.....304 Flatrock Dr.
Fortner, Mrs. Roy E.....3021 Tulip Drive
Fuller, Mrs. Robert.....1602 Crescent Dr.
Gammell, Mrs. Lindley L.....602 22nd St.
Grangier, Mrs. Bernard A.....3356 Nugent Blvd.
Hart, Mrs. Robert B.....1203 16th St.
Hauersperger, Mrs. Alfred D.....4164 River Rd.
Hawes, Mrs. Marvin E.....2975 Franklin Dr
Henry, Mrs. Alvin L.....1926 Lafayette Avenue
Holden, Mrs. Robert.....Williamsburg Apts.
Jacobs, Mrs. E. Robert.....1829 California
Knotts, Mrs. Halleck S.....2740 Washington St.
Krueger, Mrs. Robert B.....811 27th St.
Macy, Mrs. George W.....2623 Riverside Dr.
Marr, Mrs. Griffith.....Marr Rd., R. R. 1

McCullough, Mrs. Henry G.
Old Indianapolis Rd., R. R. 4
Mohler, Mrs. Floyd W.....308 Sunset Dr.
Norton, Mrs. Harold J.....909 Pearl St.
O'Bryan, Mrs. Richard B...3306 Grove Parkway
Overmire, Mrs. Joseph E.....R. R. 2
Overshiner, Mrs. Lyman.....1715 Franklin St.
Ranck, Mrs. Benjamin A.....3370 Grove Parkway
Rau, Mrs. Charles A.....1312 Audubon Dr.
Reid, Mrs. Robert M.....2712 Lafayette Ave.
Richmond, Mrs. Harold W.....1725 Washington
Ryan, Mrs. Wm. J.....3224 Grove Parkway
Sandlin, Mrs. Donald L.....R. R. 7
Schmitt, Mrs. Richard K.....2639 Riverside Dr.
Schneider, Mrs. Kenneth D...4250 N. Riverside Dr.
Sigmund, Mrs. Wm. B.....P.O. Box 306
Snapp, Mrs. Richard A.....2644 Chestnut St.
Stribling, Mrs. James L.....4232 N. Riverside Dr.
Weinland, Mrs. George C.....R. R. 5
Weisenberger, Mrs. Brockton...3305 Wooland Pkwy.
Wickstrom, Mrs. Otto W.....203 Newsom
Wickstrom, Mrs. Otto W., Jr.....3412 Grove Place
Wigh, Mrs. Russell.....2767 Lafayette Ave.
Williams, Mrs. E. W.....1902 Franklin St.
Zaring, Mrs. Byron K.....2419 Riverside Dr.

Seibel, Mrs. Robert M.....Nashville (47448)
Stevens, Mrs. Kuhrman H.
Morrison Rd., R.R. 3, Nashville (47448)
Thurston, Mrs. Lloyd.....Nashville (47448)

BENTON COUNTY

Coddens, Mrs. A. L.
404 N. Washington Ave., Fowler (47944)
McKinney, Mrs. Donald L.....Box 398, Otterbein (47970)
Turley, Mrs. V. L.
1003 East Fifth St., Fowler (47944)

BOONE COUNTY

(*Zip Code* 46052)

Lebanon

Bennett, Mrs. Kent.....2201 Terrace Lane
Boyer, Mrs. Don.....129 W. Camp
Coons, Mrs. John D.....121 Ulen Blvd.
Coons, Mrs. Ritchie.....138 Ulen Blvd.
Honan, Mrs. Paul.....202 East Dr.
Kern, Mrs. Clarence G.....1019 N. Meridian
Lenox, Mrs. Jack.....203 East Dr.
McAfee, Mrs. James.....1997 Terrace Lane
Perkins, Mrs. Thornton.....611 N. Lebanon St.
Weddle, Mrs. Charles O.....1210 N. East
Wiseheart, Mrs. Robert H.....123 Ulen Blvd.

Schaaf, Mrs. Alvin D.....Jamestown (46147)
Gregg, Mrs. Edwin.....110 W. Main, Thorntown (46071)

CARROLL COUNTY

Delphi

(*Zip Code* 46923)

Baker, Mrs. Eldon E.....R. R. 4, Box 144
Petry, Mrs. T. Neal.....130 W. Summit St.
Seese, Mrs. Robert M.....201 W. North St.
Wagoner, Mrs. Geo. W.....305 W. Summit St.

Adams, Mrs. Max R.....Park Row, Flora (46929)
Wise, Mrs. Charles L.....Shangrala, Camden (46917)

CASS COUNTY

Logansport

(*Zip Code* 46947)

Adamski, Mrs. M. S.....614 17th St.
Bailey, Mrs. Earl W.....2522 North
Bean, Mrs. Joseph S.....R. R. 1, Box 167
Burnett, Mrs. Paul C.....Logansport State Hosp.
Cobb, Mrs. Clarence M.....R. R. 4, Box 8
Eckert, Mrs. Russell A.....15 Frederick St.
Fogel, Mrs. Ernest J...Logansport State Hospital
Gatzimos, Mrs. Christos D.....3116 High St. Rd.
Glendening, Mrs. Richard L.....2300 Broadway
Hall, Mrs. Bernard R.....3400 E. Broadway
Harrington, Mrs. James F.....2316 Rolling Ridge
Hedde, Mrs. Eugene L.....2304 Chase Rd.
Hillis, Mrs. L. J.....2410 Hastye Hyll
Horning, Mrs. Richard R.
Logansport State Hospital
Jones, Mrs. J. Carl.....R. R. 3
King, Mrs. Jay M.....2319 Mayfair Dr.
Maschmeyer, Mrs. R. H.
Logansport State Hospital
Morrical, Mrs. Russell J.....415 Highland
Pfuetze, Mrs. Max E.....408 North St.
TerBush, Mrs. Edward L.....R. R. 5
Viney, Mrs. Charles L.....26th and High St.
Wilson, Mrs. Paul H.....2600 Hastye Hyll
Winter, Mrs. Donald K.....2409 Hastye Hyll

Dutchess, Mrs. Charles T.....Galveston (46932)

CLARK COUNTY

Charlestown

(*Zip Code* 47111)

Goodman, Mrs. Eli.....333 Oriole Dr.
Jones, Mrs. David.....State Rd. 39
Voskuhl, Mrs. William L.....934 Monroe St.

Clarksville

(*Zip Code* 47131)

Mudd, Mrs. Joseph.....103 Rosewood Dr.
Shaw, Mrs. Houston M.....209 Maplewood Dr.
Willner, Mrs. Alan.....214 Rosewood Dr.
Wolverton, Mrs. George.....115 Rosewood Dr.

Jeffersonville

(*Zip Code* 47130)

Buckley, Mrs. Ernest.....729 E. Park
Carney, Mrs. J. T.....2602 Hollywood Dr.
Clark, Mrs. William B.....Blackiston Mill Road
Dare, Mrs. Lee.....215 Sparks Ave.
Golden, Mrs. Wm. Y.....1929 Utica Pike
Havens, Mrs. Alfred Lyle.....1934 Utica Pike
Huoni, Mrs. John.....1407 Youngstown Dr.
Isler, Mrs. Nathaniel C.....901 Morningside Dr.
McKechnie, Mrs. Robert K.
1554 Blackiston Mill Rd.
Oca, Mrs. Clemente F.....1452 Altawood Dr.
Reed, Mrs. Edsel.....4 Pawnee Dr.
Roby, Mrs. A. L.....Rt. 9, Box 91, Utica Pike

Sellersburg

(*Zip Code* 47172)

Meyer, Mrs. Claude J.....225 W. Utica St.
Regan, Mrs. George.....303 Indiana
Sturgis, Mrs. Donald G.....542 Linnwood
Vandevert, Mrs. Arthur.....202 Highland

Carr, Mrs. Joseph..Pine Rd., Henryville (47126)
Greene, Mrs. W. R.....Henryville (47126)
Horlander, Mrs. Fridolin.....Henryville (47126)

DEARBORN COUNTY

Aurora

(*Zip Code* 47001)

Baker, Mrs. Leslie M.....204 Fifth St.
Frable, Mrs. Frank.....412 Sunnyside Ave.
Gresham, Mrs. Edwin.....182 Conwell St.
Jackson, Mrs. Kenneth.....205 Grant St.
Lindgren, Mrs. Ivan.....Cobbs Hill
Olcott, Mrs. Charles W.....305 Sunnyside

McNeely, Mrs. Matthew J.....Dillsboro (47018)
Fessler, Mrs. Gordon.....Rising Sun (47040)

Lawrenceburg

(*Zip Code* 47025)

Bonner, Mrs. Hugh J.....238 Short St.
Bowen, Mrs. Gerald.....808 Tanner Ave.
Conrad, Mrs. Henry.....370 Bielby Rd.
Houston, Mrs. Fred D.....533 Ludlow St.
Hunter, Mrs. Lowell.....2 Clinic Dr.
Morrison, Mrs. George.....35 DeJerns Lane
Pfeifer, Mrs. James M.....550 Ludlow
Rhodes, Mrs. A. Keith.....Loretta Ave.
Streck, Mrs. Francis A.....547 Ridge Ave.

DECATUR COUNTY

Greensburg

(*Zip Code* 47240)

Acher, Mrs. Robert P.....446 E. Washington
Callaghan, Mrs. W. C.....403 Barachel Lane
Dickson, Mrs. Dale D.....700 N. East St.
Miller, Mrs. James C.....178 N. Michigan Ave.
Morrison, Mrs. J. Trevor....161 N. Michigan Ave.
Shaffer, Mrs. William R.....214 N. Franklin
Walker, Mrs. Louis A.....R. R. 5

DELAWARE-BLACKFORD COUNTIES

Hurley, Mrs. John.....Daleville (47334)
Puterbaugh, Mrs. Karl.....Albany (47320)
Montgomery, Mrs. Lall G.
Box 149A, RFD 1, Gaston (47342)
Egger, Mrs. Ross.....603 N. 12th, Middletown (47356)
Owsley, Mrs. Guy...214 N. High St., Hartford City (47348)

Muncie

(*Zip Code* 47304 *unless otherwise indicated*)

A

Adams, Mrs. William B.....4608 W. Jackson St.
Alexander, Mrs. Jack.....2110 Lincolnshire
Anthony, Mrs. Harvey M.....822 W. Charles (05)
Ashburn, Mrs. Clarence.....2202 W. Purdue Rd.

B

Ball, Mrs. Clay A.....23 Greenbrier Apts. (03)
Ball, Mrs. Philip.....2820 W. Main St.
Benken, Mrs. Lawrence.....1511 Riley Rd.
Bergwall, Mrs. Warren.....20 Burnell Dr.
Botkin, Mrs. Clyde G.....2904 Riverside Ave.
Botkin, Mrs. Thomas.....2500 Bethel Pike
Branam, Mrs. George.....38 Warwick Rd.
Brown, Mrs. Leland.....605 Waid Ave.
Brown, Mrs. Stewart D.
R. R. 3, Hamilton Pk. (02)
Brown, Mrs. Thomas.....R. R. 6, Box 191 (02)
Burwell, Mrs. Stanley W.....3124 W. Gilbert
Buffington, Mrs. Gordon....305 S. McKinley Ave.
Butterfield, Mrs. R. M.....222 Winthrop Rd.
Butz, Mrs. Ralph O.....3824 Riverside Ave.

C

Clark, Mrs. Robert.....3124 University Ave.
Cooper, Mrs. John F.....1700 Winthrop Dr.
Covalt, Mrs. Wendell E.....120 Berwyn Rd.
Cullison, Mrs. John.....2601 Parkway Dr.

D

David, Mrs. George.....R. R. 3 (02)
Deutsch, Mrs. William.....3305 Riverside Ave.
Dietz, Mrs. David J.....3009 Riverside
Dunning, Mrs. Thomas.....3301 N. Tillotson Ave.
Dutchman, Mrs. William R.....1003 N. Shellbark

E-F

Fiederlein, Mrs. Frederick.....308 Wildwood

G

Geckler, Mrs. Charles E...1007 W. North St. (03)
Gibson, Mrs. Robert.....2306 Timber Lane
Gill, Mrs. Thomas A., Jr.....45 Warwick Rd.
Goodell, Mrs. Charles.....3007 Gishler Dr.
Greiber, Mrs. Marvin.....310 Riley Rd.
Gustafson, Mrs. Milton H.....230 Stradling Rd.

H-I

Hall, Mrs. Robert S.....701 Brentwood
Hayes, Mrs. T. R.....19 Warwick Rd.
Henderson, Mrs. Ramon.....52 Warwick Rd.
High, Mrs. Ralph.....2825 University Ave.
Holmes, Mrs. John.....908 W. Gilbert (05)
Hostetter, Mrs. I. S.....300 Winthrop Rd.
Imhof, Mrs. J. D.....46 Warwick Rd.

K

Kalker, Mrs. Morton.....704 Greenbriar Rd.
Kammer, Mrs. Walter F.....1005 W. Parkway Dr.
Kim, Mrs. Joon.....1707 Meadowlark Lane
Ko, Mrs. Richard.....R. R. 3 (02)
Koch, Mrs. Edwin F., Jr.....915 University Ave.
Koss, Mrs. K. William.....707 Greenbriar
Kress, Mrs. James W.....3839 Riverside Ave.

L

Lawson, Mrs. Lawrence.....1504 Riley Rd.

M-N

Mathewson, Mrs. R. C.....R. R. 6 (02)
McCallister, Mrs. Larry.....25 Warwick Rd.
McClintock, Mrs. James A...3121 University Ave.
Montgomery, Mrs. Ralph.....303 Wildwood Lane
Moore, Mrs. Jack.....2306 Park Lane
Morris, Mrs. J. W.....222 Stradling Rd.
Moss, Mrs. M. J.....1010 W. Parkway Dr.
Nelson, Mrs. Harold E.....3216 Torquay Rd.
Newnam, Mrs. Philip.....2500 Brooks Dr.

O

Osborne, Mrs. John.....3119 Petty Road
Owens, Mrs. Thomas.....608 E. Charles (05)

P-Q

Peacock, Mrs. Robert.....R. R. 3 (02)
Pippinger, Mrs. Joseph
2200 Twickingham Dr. (02)
Pippinger, Mrs. W. G.....1200 N. Tillotson
Quick, Mrs. William J.....Moore Rd., R. R. 7 (05)

R

Rettig, Mrs. Arthur..614 N. McKinley Ave. (03)
Rittmeyer, Mrs. Jack.....21 Berwyn Rd. (04)
Rivers, Mrs. Glynn.....307 Alden Rd.

S

Schulhof, Mrs. M. G.....1914 Woodmont (04)
Searight, Mrs. Howard..R. R. 5, Burlington Drive (02)
Speck, Mrs. Carlson.....3208 University
Stanley, Mrs. John R.....2303 Redding (02)
Stibbins, Mrs. Warren E.....609 Brentwood
Stout, Mrs. Francis E.....102 Berwyn Rd. (04)
Stump, Mrs. Richard....1419 Granville Ave. (03)

T

Taylor, Mrs. Donald.....8 Wildwood Lane
Tharp, Mrs. Donald.....3121 Petty Rd.
Tomlin, Mrs. Hugh M.....2920 Beechwood Ave.

V-W

Voss, Mrs. Gert.....77 Warwick Rd.
Ware, Mrs. Herbert.....1700 Glen Ellyn
Wince, Mrs. Leland.....3600 Brook Dr.
Wiza, Mrs. Edward.....105 Shellbark Rd.

Y

Young, Mrs. G. S.....114 Berwyn Rd.

Cooper, Mrs. John H.....R. R. 1, Eaton (47338)
Hinchman, Mrs. Jean.....Parker (47368)
Hill, Mrs. Robert.....Yorktown (47396)
Walker, Mrs. Jack.....R. R. 1, Box 163A, Yorktown (47396)
Weisner, Mrs. Richard....R. R. 1, Eaton (47338)

DUBOIS COUNTY

Barrow, Mrs. John H..Dale, P. O. Box 128 (47523)
Backer, Mrs. Henry George
Main St., Ferdinand (47532)
Bland, Mrs. Jack D.
311 Rye Rd. Mundelein, Ill. (60060)
Erhart, Mrs. Herbert G.....Ferdinand (47532)

Huntingburg
(*Zip Code* 47542)

Bretz, Mrs. John.....Orchard Ridge
Craig, Mrs. Harry.....R. R. 1
Scales, Mrs. Alfred B.....Holland Rd.
Scales, Mrs. Allen D.....Cedar Heights
Stork, Mrs. Harvey K.....523 First St.

Jasper
(*Zip Code* 47546)

Beaven, Mrs. John.....910 W. 13th St.
Benages, Mrs. Anthony.....948 MacArthur
Gootee, Mrs. Francis.....R. R. 1
Gootee, Mrs. Thomas.....1328 Dorbett St.
Heck, Mrs. Martin C.....408 W. 15th
Held, Mrs. George A.....716 W. Ninth
Klamer, Mrs. Charles H.....616 W. 13th St.
Ploetner, Mrs. Edward.....1344 Dorbett St.
Salb, Mrs. J. P.....R. R. 5
Wagner, Mrs. Arthur L.....825 W. 13th St.

ELKHART COUNTY

Bristol
(*Zip Code* 46507)

Neidballa, Mrs. E. G.....West Vistula St.
Schlosser, Mrs. H. C.
Seven Gables, W. Vistula St., Box 57

Elkhart
(*Zip Code* 46514)

Atwood, Mrs. Wm. H., Jr.....520 Cedar St.
Bender, Mrs. Robert L.....300 Robair Lane
Benson, Mrs. James E....1629 Rainbow Bend Blvd.
Billings, Mrs. Elmer R.....2022 E. Jackson Blvd.
Bloom, Mrs. George R.....1100 E. Jackson Blvd.
Boling, Mrs. Richard C.....217 Riverdale Dr.
Bowdoin, Mrs. George E.....3809 Greenleaf Blvd.
Campbell, Mrs. Patrick B.....1517 Meadow Lane
Classen, Mrs. Pete R. C.....Prairie St. Rd., R. R. 4
Compton, Mrs. Walter A.....2225 Greenleaf Blvd.
Cormican, Mrs. Herbert L.
1950 Rainbow Bend Blvd.
Dovey, Mrs. Edward G., Jr...1604 Springbrook Dr.
Durham, Mrs. Thomas E.....135 S. Vine St.
Echeverria, Mrs. Rodolfo E.....707 Hiawatha Dr.
Elliott, Mrs. Thomas A.....5 Kim Court
Finfrock, Mrs. James D.....608 S. West Blvd.
Fleming, Mrs. Claude F.....229 W. Jackson Blvd.
Futterknecht, Mrs. James O...2313 Morehouse Ave.
Gattman, Mrs. G. Beach.....1319 Lawn Ave.
Hannah, Mrs. Jack W.....1906 E. Jackson Blvd.
Heiser, Mrs. Ervin.....520 South West Blvd.
Heminway, Mrs. Norman L.
1700 Rainbow Bend Blvd.
Horswell, Mrs. R. G.....1629 E. Jackson Blvd.
Hull, Mrs. Arthur W.....3333 Greenleaf Blvd.
Hurley, Mrs. James William.....3439 Calumet
Jones, Mrs. Robert B., Jr.
1839 Rainbow Bend Blvd.
Keating, Mrs. John U.....1416 Strong Ave.
Kesim, Mrs. Mufit Husam
1608 Springbrook Drive
Kinter, Mrs. Burton E.....3520 E. Jackson Blvd.
Kistner, Mrs. Arthur W.....R. R. 3, Box 81
Klassen, Mrs. Otto Dyck.....R. R. 4, Box 504
Koehler, Mrs. Elmer George..615 N. Riverside Dr.
Krause, Mrs. Frederick.....1001 St. Clair St.
Lundt, Mrs. Milo O.....519 S. Second St.
Luther, Mrs. William C.....1422 Kilbourn St.
McArt, Mrs. Bruce A.....400 South West Blvd.
Mark, Mrs. George A.....908 Strong
Markel, Mrs. Ivan J.....215 W. Franklin St.
Martin, Mrs. Charles F.....Aspen Drive
Martin, Mrs. Paul H.....1519 Strong Ave.
Michols, Mrs. Raymond M.
Kingston Green Apts.-L-147,
127 West Hively Ave.
Miller, Mrs. Donald G.....1520 E. Mishawaka Rd.
Miller, Mrs. Galen R.....2229 Thorndale Ct.
Miller, Mrs Hugh A., Jr.....417 Prospect St.
Miller, Mrs. Samuel T.....174 Witmer Ave.
Mininger, Mrs. Edward P...1118 E. Jackson Blvd.
Mishkin, Mrs. Irving...1809 Rainbow Bend Blvd.
Paff, Mrs. Wm. A.....1745 Rainbow Bend Blvd.
Paine, Mrs. George E.....329 Meisner Ave.
Pancost, Mrs. Vernon K.....160 Riverview Ave.
Parshall, Mrs. Dale B.....3538 Gordon Rd.
Pletcher, Mrs. William D.....405 S. 2nd St.
O'Donovan, Mrs. Cornelius....2308 Broadmore Dr.
Rouen, Mrs. Robert L.....2002 E. Jackson Blvd.
Rupe, Mrs. Lloyd O.....R. R. 4, Oakland Ave. Rd.
Rupel, Mrs. Dennis F.....130 W. Beardsley Ave.
Scheer, Mrs. Alexander L.....12 Holly Dr.
Spray, Mrs. Page E.....658 Kilbourn St.
Stubbins, Mrs. William..1703 Rainbow Bend Blvd.
Swihart, Mrs. Danny D.....1219 Greenleaf Blvd.
Swihart, Mrs. Homer R.....1621 E. Jackson Blvd.
Whitlock, Mrs. Coleman M., Jr.
1509 Riverview Dr., R. R. 5
Wilson, Mrs. Orley E.....2505 Greenleaf Blvd.
Work, Mrs. James A., Jr.....4 St. Joseph Manor
Yoder, Mrs. C. Richard.....409 Prospect St.
Zeitler, Mrs. Philip S.....1509 Meadow Lane

Goshen
(*Zip Code* 46526)

Bender, Mrs. John M.....1303 E. Douglas St.
Bigler, Mrs. Frederick W.....124 Parmley Dr.
Bowser, Mrs. Philip G.....707 S. 7th St.
Chandler, Mrs. Leon H.....412 S. Fifth St.
Freeman, Mrs. Floyd M.....309 E. Washington St.
Gorham, Mrs. Charles E.....118 Gorham
Graber, Mrs. Virgil R.....R. R. 2, Box 107
Gunderson, Mrs. Shaun D.....R. R. 3
Haney, Mrs. Leslie.....R. R. 3
Harris, Mrs. Neil Revere.....628 S. 5th St.
Hostetler, Mrs. Carl M.....1602 S. Eighth St
Kennedy, Mrs. Myron S.....R. R. 5, Box 22B
Martin, Mrs. Floyd S.....2301 S. Main St.
Massanari, Mrs. Walter S..2613 Martin Manor Dr.
Minter, Mrs. Donald L.....2604 Woodlawn
Smucker, Mrs. Ernest E.....R. R. 5, Bluff Rd.
Troyer, Mrs. Dana O.....1727 S. 13th St.
Troyer, Mrs. George W.....110 W. Highpark Ave.

Turner, Mrs. John P.....507 Greene Road
Wagner, Mrs. David G.....R. R. 5
Westfall, Mrs. George S.....307 W. Kercher Rd.
Yoder, Mrs. Jonathan G.....900 Leroy St.

Nappanee
(*Zip Code* 46550)

Graber, Mrs. Alvin Ray.....952 E. John St.
Kendall, Mrs. F. M.....654 Woodland
Price, Mrs. Douglas W.....607 E. Van Buren

DeFries, Mrs. John J.....New Paris (46553)
Fosbrink, Mrs. E. L.....218 S. Huntington, Box 157, Syracuse (46567)
Quilty, Mrs. Thomas J..R. R. 1, New Paris (46553)
Yoder, Mrs. Carl J. 103 Brown St., Middlebury (46540)

Wakarusa
(*Zip Code* 46573)

Abel, Mrs. Robert.....105 E. Harrison
Guttman, Mrs. John B. .....109 Broadview Dr.
Miller, Mrs. James R.....P. O. Box 421

FAYETTE-FRANKLIN COUNTIES

Brookville
(*Zip Code* 47012)

Seal, Mrs. Perry F.....901 Main
Smith, Mrs. H. N.....812 Main

Connersville
(*Zip Code* 47331)

Clark, Mrs. Helen Nevin.....401 Western Ave.
Ellis, Mrs. George M.....108 East 10th St.
Gregg, Mrs. Albert F.....900 Oak St.
Hudson, Mrs. Arlington M.....80 East Dr.
Janes, Mrs. R. G.....8 Dorsett Dr., R. R. 2
Kauffman, Mrs. Robert W.....R. F. D. 2
Kerrigan, Mrs. William F. .....R. F. D. 6
Lockhart, Mrs. Jack M.....54 West Dr.
Mountain, Mrs. Francis B.....74 Center Dr.
Neukamp, Mrs. Frank H.....R. R. 6
Sanders, Mrs. Bertram W.....1533 Virginia Ave.
Steinem, Mrs. Joseph L.....R. R. 3
Watterson, Mrs. Gerald T.....1704 Virginia Ave.

FLOYD COUNTY

Jeffersonville
(*Zip Code* 47130)

Baxter, Mrs. S. M.....3100 Centralia Ct.
Gentile, Mrs. John P.....3405 Centralia Ct.
Sloan, Mrs. Herbert.....213 Lynnwood Dr.

New Albany
(*Zip Code* 47150)

Baxter, Mrs. J. W., Jr.....426 Woodrow Ave.
Best, Mrs. Maurice M.....1233 Vance Ave.
Bickers, Mrs. Everett E.....3325 Buffalo Trails
Brown, Mrs. K. H.....1654 Hedden Park
Buchman, Mrs. Marshall.....1824 State St.
Cannon, Mrs. Daniel H.....1203 E. Spring St.
Cook, Mrs. Melvin.....2505 Glenwood Park
Edwards, Mrs. W. F.....615 Beharrel Ave.
Garner, Mrs. Wm. H., Sr.....922 E. Spring St.
Garner, Mrs. William H., Jr.....1510 Sunset Dr.
Hess, Mrs. P. Patrick.....1313 Ridgeway Ave.
Johnson, Mrs. William V.....2715 Kaywood Dr.
LaFollette, Mrs. Donald R. Box 494-1, R. R. 2, Quarry Road
LaFollette, Mrs. Robert E.....2515 Glenwood Ct.
Nedelkoff, Mrs. Bogdan.....R. R. 2, Box 500
Paris, Mrs. John M.....2003 Lindbergh Ct.
Pierce, Mrs. Gene S.....1425 Bellmeade Dr.
Robertson, Mrs. A. N.....323 E. Ninth St.
Ruoff, Mrs. William.....1109 Lafayette Dr.
Sonne, Mrs. Irvin H.....1607 Hedden Court
Streepey, Mrs. Jefferson I.....1919 DePauw Ave.
Voyles, Mrs. Harry.....425 Beharrel Ave.
Wallace, Mrs. Elmer L.....1804 DePauw Ave.
Wolfe, Mrs. Morton F.....2533 Glenwood Ct.
Wolfe, Mrs. Nelson A.....2007 Graybrook Lane
Worley, Mrs. H. L.....1923 DePauw Ave.

Higgins, Mrs. John R. R. R. 2, Box 405-C, Floyds Knobs (47119)
McCullough, Mrs. James Box 447, Skyline Drive, Floyds Knobs (47119)

FULTON COUNTY

Miller, Mrs. Virgil C.....P. O. Box 37, Akron (46910)
Stinson, Mrs. Arthur E.....Athens (46912)
Kraning, Mrs. Kenneth K. 834 West Shore Dr., Culver (46511)

Rochester
(*Zip Code* 46975)

Dielman, Mrs. Franklin C.....920 Jefferson St.
Herendeen, Mrs. Elbie V.....317 W. Seventh St.
Knochel, Mrs. Wayne.....1115 Washington St.
Richardson, Mrs. Chas. L.....R. R. 2, Box 276
Richardson, Mrs. Joseph D.....R. R. 2, Box 260
Rowe, Mrs. Howard H.....417 W. Ninth St.
Rusler, Mrs. William J.....R. R. 2
Stinson, Mrs. Dean K.....1318 Main St.
Stone, Mrs. Grant.....1100 Washington

GIBSON COUNTY

Geick, Mrs. Raymond G..207 N. Main, Ft. Branch (47533)
Marchand, Mrs. Edwin V.....Haubstadt (47539)

Oakland City
(*Zip Code* 47560)

Clark, Mrs. Carl M.....123 Vine St.
Dye, Mrs. William E.....518 S. Jackson St.

Princeton
(*Zip Code* 47570)

Carpentier, Mrs. Harry F.....319 E. State St.
Folck, Mrs. John K.....528 N. Main St.
Graves, Mrs. Orville M.....125 W. Walnut St.
LinDaver, Mrs. David.....Petersburg Rd.
McCarty, Mrs. Virgil.....403 W. Spruce St.
McElroy, Mrs. Robert S.....404 W. Walnut St.
Peck, Mrs. James F.....605 W. Monroe St.
Weitzel, Mrs. Roland E.....309 W. Spruce St.
Wells, Mrs. William R.....Broadview Addition

GRANT COUNTY

Marion
(*Zip Code* 46952)

Abell, Mrs. Charles F.....915 Wabash Ave.
Adams, Mrs. Luther.....V.A. Hospital
Alderfer, Mrs. Henry.....919 Euclid Ave.
Ansbacher, Mrs. Stefan.....1115 Overlook Rd.
Ayres, Mrs. W. W.....820 Jeffras Ave.
Bailey, Mrs. Douglas.....1316 Elm Lane
Beck, Mrs. Thomas.....R. R. 4
Bennett, Mrs. Ed. R.....V. A. Hospital
Bloom, Mrs. A. Ward.....610 River Rd.
Braunlin, Mrs. Robert.....P.O. Box 467
Brown, Mrs. Robert M.....825 Euclid Ave.
Comeau, Mrs. Wm. J.....918 Hawthorne
Cunningham, Mrs. Robert.....1017 Euclid Ave.
Davis, Mrs. Joseph B.....1315 Sheridan Rd.
Davis, Mrs. Merrill S.....723 Euclid Ave.

Donaldson, Mrs. Miles.....512 Spencer Ave.
Fisher, Mrs. Henry.....R. R. 4
Fisher, Mrs. Pierre J., Jr.....R. R. 1
Fuelling, Mrs. James.....R. R. 2, Box 199
Ganz, Mrs. Max.....904 Jeffras Ave.
Goldsmith, Mrs. David.....2711 River Rd.
Grant, Mrs. Arthur M.....3602 Wildwood Dr.
Hummel, Mrs. R. M.....2411 Lommel Lane
Jarrett, Mrs. John C.....3418 Wildwood Dr.
Lahr, Mrs. Richard.....815 Jeffras Ave.
Larzelere, Mrs. Henry.....Bocock Rd., R. R. 2
Lavengood, Mrs. Russell W.....Charles Rd. R. R.
Lonngren, Mrs. Dudley.....611 Cardinal Lane
Love, Mrs. V. Logan.....808 Crossway
McKeever, Mrs. J. W.....1016 Euclid Ave.
Miller, Mrs. H. Allison.....1010 W. Fourth St.
Musselman, Mrs. L. K.....R. R. 5, Box 239
Pattison, Mrs. John D.....1315 Elm Lane
Pearcy, Mrs. Marcene.....712 Buckingham Dr.
Powell, Mrs. J. P.....127 River Dr.
Reid, Mrs. James D.....505 Buckingham Dr.
Renbarger, Mrs. Lester.....2111 Wabash Pike
Rhamy, Mrs. Arthur.....1230 Euclid Ave.
Rhorer, Mrs. John G.....711 Wabash Ave.
Richardson, Mrs. Jos. H.....911 River Dr.
Simmons, Mrs. Frederick H.....2607 Beech Lane
Skomp, Mrs. Claud E.....1123 Euclid Ave.
Smith, Mrs. Barton T.....515 Val Lane
Thompson, Mrs. B. Jay.....123 River Dr.
Walton, Mrs. R. Lee.....607 Cardinal Lane
Warren, Mrs. Carroll B.....1211 Euclid Ave.
Watkins, Mrs. James K.....620 W. 6th St.
Weinberg, Mrs. Samuel.....905 Euclid Ave.
Young, Mrs. Robert G.....1207 Northwood Dr.

Malott, Mrs. Fred.....Converse (46919)
Yale, Mrs. Charles.....Fairmount (46928)
Garrison, Mrs. L. J.....515 E. Main St., Gas City (46933)
Koontz, Mrs. William A.....334 E. Main, Gas City (46933)
Shoemaker, Mrs. Richard L.....211 E. South "A," Gas City (46933)
Baskett, Mrs. R. J.....412 S. Main St., Jonesboro (46938)
Taylor, Mrs. E. C...226 E. Anson, Upland (46989)
Rifner, Mrs. Eugene.....Van Buren (46991)
McIlwain, Mrs. Robert....484 South Shore, Culver (46511)

HAMILTON COUNTY

Karlick, Mrs. Joseph R.....Arcadia (46030)
Donahue, Mrs. C. M.
140 E. Main St., Carmel (46032)
Freeman, Mrs. Max E.
445 W. Smoky Rd., Carmel (46032)
Thomas, Mrs. W. Clayton
80 4th Ave. S.E., Carmel (46032)

Noblesville
(*Zip Code* 46060)

Ambrose, Mrs. J. C.....298 N. Ninth St.
Blackburn, Mrs. Howard..14010 Allisonville Rd.
Hash, Mrs. John S.....R. R. 4
Haywood, Mrs. John G.....Craig Highlands
Kraft, Mrs. Haldon C.....15075 Allisonville Rd.
Lanning, Mrs. R. Adrian.....R. R. 2
Lloyd, Mrs. Joe R.....559 Sunset Dr.
Shanks, Mrs. Ray W.....14050 Allisonville Rd.

Manhart, Mrs. Doyle B.....R. R. 2, Sheridan (46069)
Newby, Mrs. Eugene.....R. R. 1, Sheridan (46069)
Waitt, Mrs. Paul.....406 E. Fifth St., Sheridan (46069)
Connoy, Mrs. Andrew
139 N. Union, Westfield (46074)

HANCOCK COUNTY

Johnston, Mrs. W. R.....Charlottesville (46117)
Scott, Mrs. Robert.....Charlottesville (46117)
Garrison, Mrs. James.....Cumberland (46229)
Rhynearson, Mrs. Hal R...235 Merrill St., Fortville (46040)

Greenfield
(*Zip Code* 46140)

Allen, Mrs. Joseph.....210 E. Lincoln
Anderson, Mrs. James T.....311 Madison Dr.
Beeson, Mrs. Wilbur.....209 N. Penn
Endicott, Mrs. Wayne.....115 McClelland
Farrell, Mrs. John J., Jr.....North St., Rd. 9
Henn, Mrs. R. Anthony.....137 W. Michigan
Hunter, Mrs. Donn R.....630 N. Spring St.
Kinneman, Mrs. Robert E.....120 McClelland Dr.
Kirby, Mrs. Ted C.....122 Grandison Rd.
Moenning, Mrs. John E.....1517 Bowman Dr.
Rea, Mrs. Ralph L.....Greenfield
Singco, Mrs. Bienvenido O.....1513 Brunner Dr.
Smith, Mrs. John H.....144 Grandison Rd.
Vingis, Mrs. Bronie A.....705 N. State St.
Woods, Mrs. James R.....715 N. East St.

Pierson, Mrs. Thomas A...New Palestine (46163)
Cagle, Mrs. Robert.....New Palestine (46163)
Miller, Mrs. Joseph A.....R. R. 12, Box 230 Y, Oaklandon (46236)
Kuhn, Mrs. Robert.....Wilkinson (46186)

HENDRICKS COUNTY

Black, Mrs. James...8 Green Acre Ct., Brownsburg (46112)
Foltz, Mrs. Lloyd.....North Ridge, Brownsburg (46112)
Scudder, Mrs. A. N.....24 N. Grant, Brownsburg (46112)
Walker, Mrs. Thomas..Fairfield Hts., Brownsburg (46112)

Danville
(*Zip Code* 46122)

Calhoon, Mrs. John.....R. R. 3, Box 1
Cheesman, Mrs. Donald D.....37 Orchard Lane
Coats, Mrs. Eli.....R. R. 3, Box 79E
Gibbs, Mrs. Joseph W.....445 E. Mill St.
Heinlein, Mrs. Carl L.....540 S. Cross
Kerlin, Mrs. Joseph.....16 Urban St.
Kirtley, Mrs. Robert W.....R. R. 3, Box 196
Koch, Mrs. Elmer.....301 S. Bowen
Terry, Mrs. Lloyd.....292 W. Marion

Ellis, Mrs. L. Hall.....Lizton (46149)
Scamahorn, Mrs. Malcolm O.....Pittsboro (46167)

Plainfield
(*Zip Code* 46168)

Aiken, Mrs. Milo M.....P.O. Box 247
Cohen, Mrs. Irving.....645 E. Main St.
Haggard, Mrs. David B.....R. R. 2, Box 232
Stafford, Mrs. William C.....P.O. Box 97C
Warbinton, Mrs. Fred P.....504 S. Carr Road

HENRY COUNTY

New Castle
(*Zip Code* 47362)

Amos, Mrs. Robert L.....924 Lincoln Ave
Brock, Mrs. J. T.....100 Van Nuys Rd.
Burnett, Mrs. Arthur B.....801 Melody Lane
Cain, Mrs. David R.....3701 S. Memorial Dr.
Dye, Mrs. Cloyd L.....R. R. 5
Easter, Mrs. James N.....1112 Audubon Rd.
Fisher, Mrs. John E.....1135 Woodlawn Dr.
Foster, Mrs. Ray T.....420 N. Main St.
Harrison, Mrs. Benjamin L.....233 Bundy Ave.
Heilman, Mrs. William C., Jr...1112 St. James Ct.

Hill, Mrs. Kenneth G.....707 Lelene
KinKade, Mrs. Paul T.....3306 W. Acre Dr.
Life, Mrs. Homer L.....1107 St. James Ct.
McDonald, Mrs. Frank C.....365 Trojan Lane
McElroy, Mrs. James S.....1213 Audubon Rd.
May, Mrs. A. J.....319 S. 14th St.
Murray, Mrs. William E.....100 Van Nuys Rd.
Saint, Mrs. William.....705 Hawthorn Rd.
Smith, Mrs. Mark.....631 S. 11th St.
Steussy, Mrs. Calvin N.....601 Hoosier Dr.
Stricker, Mrs. Paul J.....719 Fair Oaks Dr.
Vivian, Mrs. Donald E.....R. R. 4
Wiggins, Mrs. D. S.....219 S. 12th St.
Wilhelm, Mrs. Guido P.....1114 Lincoln Ave.

Wiatt, Mrs. Leonard H.
108 N. Wash. St., Knightstown (46148)
Stauffer, Mrs. George E.....Mooreland (47360)
Marshall, Mrs. Lloyd....Walnut St., Mt. Summit (47361)
Robertson, Mrs. William S.....213 W. Main St., Spiceland (47385)

HOWARD COUNTY

Smith, Mrs. Charles
10512 Spring Hill Dr., R. R. 1, Carmel (46032)
Denton, Mrs. Larkin D....S. Meridian, Greentown (46936)
Townley, Mrs. Normand.....6211 Harbridge Rd., Indianapolis (46220)

Kokomo
(*Zip Code* 46901)

Adams, Mrs. C. J.....1216 W. Superior
Althoff, Mrs. William.....2501 S. Wabash
Alward, Mrs. J. H.....401 W. Walnut
Artis, Mrs. Myrle E.....900 E. Broadway
Ault, Mrs. Carl H.....3015 Dellwood Dr.
Bowers, Mrs. Copeland C.....1530 W. Taylor
Bowers, Mrs. Garvey B.....421 Morningside
Bowers, Mrs. John A.....1535 W. Jefferson
Bradley, Mrs. Richard V.....3210 Janice Dr.
Bruegge, Mrs. Theodore J.....2225 S. Wabash
Cattell, Mrs. Lee M.....1235 W. Sycamore
Clarke, Mrs. Elton R.....4320 W. Sycamore
Conley, Mrs. Thomas M.....2811 Dellwood Dr.
Craig, Mrs. R. A.....4105 W. Sycamore Rd.
Craig, Mrs. Reuben.....410 S. Hickory Lane
Doss, Mrs. Jerome....137 Westmoreland Drive E.
Earl, Mrs. Max M.....2210 S. Wabash
Elleman, Mrs. Jack.....414 W. Mulberry
Ericson, Mrs. Homer S.....124 Leafy Lane
Farrell, Mrs. T. Edwin.....3816 Red Bud Lane
Ferry, Mrs. Paul W.....1207 W. Sycamore
Fields, Mrs. Donald L.....3021 Mayfair
Frazier, Mrs. Jack L.....3208 Tally Ho Dr.
Fretz, Mrs. Richard C.....4701 Mayfield Dr.
Golper, Mrs. Marvin N.....411 Morningside Dr.
Good, Mrs. Richard P.....227 N. Forest Dr.
Grothouse, Mrs. Carl B.....925 Bellevue Place
Guin, Mrs. Jere D.....4401 N. Parkway
Halfast, Mrs. Richard W.....2505 Katherine Ave.
Harshman, Mrs. James.....4400 Mayfield Dr.
Harvey, Mrs. E. C.....4822 Parkway Dr.
Higgins, Mrs. Jack W.....511 W. Markland Ave.
Hutto, Mrs. William H...4815 West Sycamore Rd.
Jewell, Mrs. G. M.....1318 W. Sycamore
Kremers, Mrs. George A.....2401 S. Wabash
Longshore, Mrs. Robert E.....145 Westmoreland
McClure, Mrs. Warren N.....309 Lody Lane
McIndoo, Mrs. R. E.....820 W. Walnut
Michael, Mrs. Robert L.....4610 W. Sycamore Rd.
Moore, Mrs. John M.....813 Melody Lane
Morrison, Mrs. W. R.....413 Conradt Ave.
Murray, Mrs. Ernest C.....2200 S. Webster
Paris, Mrs. Durward W.....2417 S. Lafountain
Perkins, Mrs. P. L.....Miller Wood Lane
Phares, Mrs. Robert W.....1712 S. Malfalfa Rd.
Prather, Mrs. Philip E.....123 Magnolia Dr.
Radpour, Mrs. Shokri.....4509 Mayfield Dr.
Rinehart, Mrs. James.....2504 Katherine
Rudicel, Mrs. Max W.....321 Kingston Rd.
Scherschel, Mrs. Thomas R.....809 Dye Rd.
Schwartz, Mrs. F. C.....5015 W. Sycamore Rd.
Sekulich, Mrs. Milo.....3725 Red Bud Lane
Shenk, Mrs. Earl M.....R. R. 5, Box 408
Sorenson, Mrs. Raymond..4301 Miller Wood Lane
Tate, Mrs. James...3820 Alameda Blvd. Apt. 79
Tofaute, Mrs. John L.....1721 W. Walnut St.
Trimble, Mrs. John.....1704 W. Sycamore
Van Denbark, Mrs. Howard M....5908 Yale Blvd.
Wachob, Mrs. Tom W., Jr.....806 James Dr.
Walton, Mrs. F. Richard....317 N. Armstrong
Wilson, Mrs. Norman K.....3201 Janice Dr.

Evans, Mrs. Robert W.....Russiaville (46979)

HUNTINGTON COUNTY

Huntington
(*Zip Code* 46750)

Brubaker, Mrs. Harold S.....721 Flaxmill Rd.
Clark, Mrs. Joseph H.....R. R. 9
Clunie, Mrs. Wm. A.....R. R. 9
Cope, Mrs. Stanton E.....1022 N. Jefferson St.
Doermann, Mrs. Paul E.....Grimm Rd., R. R. 8
Eviston, Mrs. J. Boyd.....1362 Poplar St.
Gill, Mrs. D. Richard.....6 Northway Dr.
Grayston, Mrs. Wallace S.....303 E. Market St.
Marks, Mrs. Howard H.....1120 N. Jefferson St.
Meiser, Mrs. Robert D.....1738 Cherry St.
Miller, Mrs. Wayne S.....R. R. 8
Mitman, Mrs. Floyd B.....1471 Oak St.
Peare, Mrs. Reeve B.....1517 Cherry St.
Van Campen, Mrs. Warren.....1137 Cherry
Wagner, Mrs. Richard W.....Old Andrews Rd.
Wheeler, Mrs. Barth E.....1525 Cherry St.

Cooper, Mrs. B. Trent.....Roanoke (46783)
Bennett, Mrs. J. B.....Warren (46792)

JACKSON-JENNINGS COUNTIES

Brownstown
(*Zip Code* 47220)

Gillespie, Mrs. G. R.....710 Commerce
Scharbrough, Mrs. William.....R. R. 2
Shields, Mrs. Jack.....721 Spring
Shortridge, Mrs. Wilbur.....R. R. 1

Crothersville
(*Zip Code* 47229)

Adair, Mrs. W. K.....208 S. Armstrong
Bard, Mrs. Frank B.....305 E. Howard

North Vernon
(*Zip Code* 47265)

Berkshire, Mrs. Shaffer.....121 W. Long St.
Calli, Mrs. Louis J.....408 S. State
Ellis, Mrs. Forrest D.....130 W. Long St.
Johnson, Mrs. William A.....318 Jennings St.
Thayer, Mrs. Benet.....214 Jennings St.

Seymour
(*Zip Code* 47274)

Baxter, Mrs. Harry..710 West Dr., Sunset Pkwy.
Black, Mrs. J. M...671 Braewick Rd., Sunset Pkwy.
Blaisdell, Mrs. William F.....827 S. Pine St.
Bosch, Mrs. Ralph O..930 South Dr., Sunset Pkwy.
Day, Mrs. Durbin.....515 W. Sixth St.
Graessle, Mrs. H. P...640 East Dr., Sunset Pkwy.
Kamman, Miss Martha.....332 W. Oak St
Martin, Mrs. Guy.....1408 Ewing St.
Ripley, Mrs. John W.....2001 Ewing St.
Wiethoff, Mrs. C. A...615 West Dr., Sunset Pkwy.

Knotts, Mrs. Slater....R. R. 3, Columbus (47201)

JASPER COUNTY

Schantz, Mrs. Richard
418 S. Kentucky St., Remington (47977)

Rensselaer
(*Zip Code* 47978)

Beaver, Mrs. Raymond E.....111 Thompson St.
O'Brien, Mrs. Francis E.....530 Park Ave.
Ockermann, Mrs. Kenneth R.....202 Home St.
Williams, Mrs. Paul A.....402 N. Weston St.

JAY COUNTY

Andrews, Mrs. Frank....R. R. 2, Geneva (46740)
Donnally, Mrs. George....R. R. 1, Geneva (46740)
Pretorius, Mrs. Walter.....Fort Recovery, Ohio (45846)
Rudolph, Mrs. Rosser.....Geneva (46740)
Shroyer, Mrs. Herbert..R. R. 2, Dunkirk (47336)

Portland
(*Zip Code* 47371)

Cripe, Mrs. William H.....507 W. High St.
Fitzpatrick, Mrs. James S.....405 W. Race St.
Gillum, Mrs. Eugene.....W. Votaw St
Keeling, Mrs. F. E.....609 W. Race St.
Lopez, Mrs. Alfonso.....446 W. Arch St.
Schenck, Mrs. Ralph.....R. R. 2, W. 7th St.
Spahr, Mrs. Donald E.....615 W. Race St.
Steffy, Mrs. Ralph M.....321 E. Race St.
Vormohr, Mrs. Joseph F.....1011 S. Meridian St.

JOHNSON COUNTY

Franklin
(*Zip Code* 46131)

Andrews, Mrs. Hugh K.....R. F. D. 4
Bullers, Mrs. Robert C.....395 S. Home Ave.
Bullington, Mrs. George.....R. F. D. 4
Chappel, Mrs. A. T.....1101 North Dr.
Deppe, Mrs. Charles F.....1215 Park Ave.
Ferrara, Mrs. Joseph F.....1000 E. King St.
Foster, Mrs. R. H. K.....1025 Orchard Lane
Harvey, Mrs. Harry.....Methodist Home
Hibbs, Mrs. W. G.....R. F. D. 1
Jones, Mrs. Charles A.....1010 E. Adams Dr.
Mock, Mrs. Harry E.....201 E. Monroe St.
Murphy, Mrs. Harry E.....422 N. Walnut St.
Province, Mrs. Wm. D.....51 N. Water St.
Records, Mrs. Arthur W.....216 E. Jefferson St.
Records, Mrs. John M.....1138 Orchard Lane
Reynolds, Mrs. Paul.....R. R. 4
Ritteman, Mrs. George.....R. R. 3, Box 19A
Roller, Mrs. Mac.....1100 Hillview Dr.
Stogsdill, Mrs. W. W.....R. R. 4
Walters, Mrs. Jack L.....1205 E. Jefferson St.
Waymire, Mrs. Wm. M.....21 South Dorm Dr.
Wesemann, Mrs. Merrill M.....17 Morning Dr.

Greenwood
(*Zip Code* 46142)

Brown, Mrs. George E.....404 Beech Park Dr.
Link, Mrs. Charles.....208 S. Fairview
Machledt, Mrs. John.....243 S. Madison
Ogle, Mrs. Robert.....474 W. Wiley
Sheek, Mrs. Kenneth I.....407 S. Forest Dr.
Tiley, Mrs. George.....40 N. Madison
Young, Mrs. Joseph W.....904 Beech Park Dr.

Deogracias, Mrs. Francisco D..Edinburgh (46124)

KNOX COUNTY

Vincennes
(*Zip Code* 47591)

Anderson, Mrs. John B.....1222 Forest Hill Dr.
Anderson, Mrs. Richard M.....Monroe City Rd.
Arbogast, Mrs. Paul B.....1420 Old Orchard Rd.
Barrett, Mrs. Thomas L.....2520 Old Orchard Rd.
Bartlett, Mrs. Donald T.....1315 McDowell Rd.
Beckes, Mrs. Ellsworth.....220 N. 5th
Black, Mrs. Boyd K.....1008 State Road 67-N
Cantwell, Mrs. E. R.....P.O. Box 444
Chattin, Mrs. Herbert O.....729 Main St.
Coffel, Mrs. Melvin H.....Simpson Lake
Corsentino, Mrs. Bart E.....110 State Road 67
Curtner, Mrs. Myron L.....216 N. Sixth St.
Dayson, Mrs. Louie O.....R. R. 2
Edwards, Mrs. Edward T., Jr.....702 Vigo St.
Floyd, Mrs. Malcolm.....R. R. 1
Hendrix, Mrs. Charles.....1202 E. Sycamore
Jacqmain, Mrs. Ralph J.....Monroe City Rd.
McCormick, Mrs. Hubert D.....518 N. Fourth St.
McDowell, Mrs. M. M.....1322 Audubon Rd.
Miller, Mrs. Charles L.....P. O. Box 201
Murray, Mrs. John.....3207 Hillcrest Rd.
Nichols, Mrs. Robert J.....1906 John R. Rd.
Parmenter, Mrs. Harry B.....205 Elm Lane
Shaffer, Mrs. Kenneth L.....2600 Ridge Rd.
Shanklin, Mrs. Jack L.....1545 Barnett Lane
Smith, Mrs. S. Joseph.....504 N. Fourth St.
Smith, Mrs. Ralph.....Old Bruceville Rd.
Spencer, Mrs. Frederic.....902 Perry St.
Stein, Mrs. Richard H.....1209 Old Orchard Rd.
Stewart, Mrs. Frank W.....Hillcrest Rd.
Vaughn, Mrs. Walter R.....2018 Prospect Ave.
Von der Lieth, Mrs. William C.....R. R. 3
Welch, Mrs. Norbert M.....Monroe City Rd.

KOSCIUSKO COUNTY

Urschel, Mrs. Dan L.....Mentone (46539)
Wilson, Mrs. Wymond B...P. O. Box 421, Mentone (46539)
Hogle, Mrs. Frank.R. R. 1, North Webster (46555)
Pierson, Mrs. Pearl H.....R. R. 1, Silver Lake (46982)
Baum, Mrs. John R....307 7th St., Winona Lake (46590)

Warsaw
(*Zip Code* 46580)

Arford, Mrs. John E.....1319 E. Center St.
Cron, Mrs. William J.....1548 Country Club Dr.
Hashemi, Mrs. Hossein.....1306 Ranch Rd.
Haymond, Mrs. George M...945 Country Club Dr.
Keough, Mrs. Thomas F.....322 N. Lake St.
Laird, Mrs. L. A.....1816 E. Sheridan
Moser, Mrs. Arthur.....335 E. Main
Murphy, Mrs. Samuel C.....216 South High St.
Parke, Mrs. William.....1922 Rosemont
Snider, Mrs. Ronald P.....Springhill Acres
Thomas, Mrs. E. Winton.....711 E. Main St.

LAKE COUNTY

Cedar Lake
(*Zip Code* 46303)

Babcoke, Mrs. Gary.....R. R. 4, Box 410
Misch, Mrs. William A.....R. R. 4, Box 58

Crown Point
(*Zip Code* 46307)

Gutierrez, Mrs. P. E.....765 Williams Dr.
Han, Mrs. Daniel.....Rt. 7, Box 138K
Horst, Mrs. William.....468 Lake St.
Mirich, Mrs. Ernest C.....940 W. 66th Ave.

East Chicago
(*Zip Code* 46312)

Campagna, Mrs. E. A.....4320 Ivy St.
Ernst, Mrs. H. C.....4219 Baring Ave.
Given, Mrs. Gilbert F.....1318 W. 142nd St.
Grosso, Mrs. William.....4132 Northcote
Niblick, Mrs. James S.....4115 Fir St.

Romero, Mrs. Plinio.....2103 Franklin St.
Serna, Mrs. Jesus A.....4316 Parrish Ave.
Shapiro, Mrs. Joseph.....4214 Parrish Ave.

East Gary

(*Zip Code* 46405)

Markle, Mrs. Joseph G.....3143 Ripley

Gary

(*Zip Code* 464 *plus zone number*)

Agana, Mrs. Adriano.....6121 Birch (06)
Almquist, Mrs. C. O.....550 Lincoln St. (02)
Amico, Mrs. P. J.....2119 W. 50th Place (08)
Bills, Mrs. Robert N.....534 Lincoln St. (02)
Boone, Mrs. Clarence W.....1914 Tyler Court (07)
Brincko, Mrs. John.....3537 Harrison St. (08)
Carbone, Mrs. Joseph A.....526 Johnson St. (02)
Dierolf, Mrs. E. J.....630 N. Montgomery (03)
Dosado, Mrs. Elpidio.....8155 Juniper (03)
English, Mrs. Hubert M.....575 Taft St. (04)
Fadell, Mrs. M. J.....701 W. 55th St. (08)
Fadul, Mrs. Armand.....2145 W. 51st Ave. (08)
Gallinatti, Mrs. J. J.....7900 Ash Ave. (03)
Goldberg, Mrs. Harold B...825 W. 35th Ave. (08)
Goldstone, Mrs. Arthur....3578 Buchanan (08)
Goldstone, Mrs. Joseph.....3360 Pierce St. (08)
Gregoline, Mrs. Eugene..129 Glen Park Ave. (08)
Hadey, Mrs. James H.....505 Taft St. (04)
Harper, Mrs. J. Winston.....1957 Chase St. (04)
Johnson, Mrs. Arnold L....2418 W. 19th Ave. (07)
Kaltenthaler, Mrs. Albert....5981 Grant Pl. (08)
Kobrin, Mrs. Meyer W.....2300 W. 6th Ave. (04)
Kolettis, Mrs. J. G.....6401 Chanticleer Lane (08)
Kopcha, Mrs. Joseph E.....650 Pierce St. (02)
Lazo, Mrs. Vicente.....707 Harrison St. (02)
Lopez, Mrs. Santiago.....5380 Connecticut (09)
Lorenty, Mrs. Thaddeus B.....3654 Madison (08)
Lytwakiwsky, Mrs. Anatol..8700 Forest Ave. (03)
Manalo, Mrs. F. S.....538 Lincoln St. (02)
Marcus, Mrs. M. C.....8641 Lakeshore Dr. (03)
Martino, Mrs. Robert S....3000 W. 55th Ave. (08)
Mather, Mrs. J. Winford..7224 Maple Ave. (03)
May, Mrs. R. Milton.....667 Van Buren St. (02)
Mayorga, Mrs. Alfredo....1811 W. 54th Ave. (08)
Morris, Mrs. J. A.....2401 W. 6th Ave. (04)
Moswin, Mrs. Jack A.....701 Arthur St. (04)
Mott, Mrs. Williard.....1971 Chase St. (04)
Oberlander, Mrs. Seymour.....6701 Ash (03)
Olson, Mrs. L. Dale.....716 Grant St. (04)
Ornelas, Mrs. Joseph P...6339 Oakwood Lane (08)
Pappas, Mrs. Edward T.....569 Pierce St. (02)
Parratt, Mrs. L. W.....131 W. 46th (08)
Robinson, Mrs. Walter K..500 N. Montgomery St. (03)
Roth, Mrs. Leo.....7033 E. 1st Ave. (03)
Rubin, Mrs. Simon S.....2131 W. Fifth Ave. (04)
Sala, Mrs. Joseph.....2333 W. 55th Ave. (04)
Schulz, Mrs. Kurt J.....2521 W. 58th Pl. (08)
Senese, Mrs. Thomas.....581 Johnson (02)
Stimson, Mrs. Harry R...4338 Jefferson St. (08)
Thomas, Mrs. Gerald J.....631 Miami (03)
Valencia, Mrs. M. M.....7700 Hemlock (03)
Volan, Mrs. Geo. J...430 South Grand Blvd. (03)
Young, Mrs. George M..4580 Washington St. (08)
Zucker, Mrs. Edward....7009 E. First St. (03)

Griffith

(*Zip Code* 46319)

Lundeberg, Mrs. Ralph A.....1211 N. Harvey
Riordan, Mrs. John.....318 W. Glen Park Ave.
Siekierski, Mrs. J. M.....445 N. Broad Street

Hammond

(*Zip Code* 463 *plus zone number*)

Allegretti, Mrs. Michael L..6237 Forest Ave. (24)
Barron, Mrs. Elmer A.....6635 Kansas (23)
Beconovich, Mrs. Robert....6540 Forest Ave. (24)
Cotter, Mrs. Edward R..7225 Knickerbocker Pkwy. (23)
Dragomer, Mrs. A. S.....6629 Carolina Ave. (23)
Eggers, Mrs. H. W.....6542 Hohman (20)
Egnatz, Mrs. Nicholas....820 Highland St. (20)
Elledge, Mrs. Ray.....6415 Forest Ave. (24)
Fischer, Mrs. Burnell.....49 Indi-Illi Park (24)
Fox, Mrs. J. M.....7031 Forest Ave. (24)
Gevirtz, Mrs. Milton B...7142 Hohman Ave. (24)
Grabow, Mrs. E. F.....6501 Moraine (24)
Hack, Mrs. Edmund C.....7147 Olcott St. (23)
Hickman, Mrs. A. Lee, Jr....7412 Knickerbocker (23)
Husted, Mrs. Robert G...7248 Forest Ave. (24)
Jones, Mrs. E. S.....50 Kenwood St. (24)
Koransky, Mrs. David S...7048 Forest Ave. (24)
Kretsch, Mrs. Russell W...7214 Hohman Ave. (24)
Marks, Mrs. Ora L.....7111 Olcott Ave. (23)
Maroc, Mrs. James.....6826 Rosewood (24)
Mason, Mrs. Richard L.....6915 Magoun (23)
Modjeski, Mrs. Joseph R.
7327 Knickerbocker Pkwy. (23)
Neal, Mrs. L. W.....7301 Forest Ave. (24)
Panares, Mrs. Solomon V.....4 172nd Pl. (24)
Peck, Mrs. Edward A.....6422 Moraine Ave. (24)
Pilot, Mrs. Jean..7137 Knickerbocker Pkwy. (23)
Polite, Mrs. Nicholas L.....7320 California (23)
Ramker, Mrs. Daniel T...7129 Arizona Ave. (23)
Remich, Mrs. Antone C...6412 Moraine Ave. (24)
Repay, Mrs. W. A..7130 Knickerbocker Pkwy. (23)
Rhind, Mrs. A. W.....7126 Forest Ave. (24)
Rosevear, Mrs. Henry J...6531 Forest Ave. (24)
Row, Mrs. Perrie Q.....6712 Hohman Ave. (24)
Rubright, Mrs. Robert L...7258 Forest Ave. (24)
Rudolph, Mrs. F. G.....6607 Forest Ave. (24)
Santare, Mrs. V. J.....6508 Forest Ave. (24)
Schlesinger, Mrs. Daniel J..6633 Forest Ave. (24)
Schulfer, Mrs. R. J.....1045 River Dr. (24)
Stern, Mrs. S. Lewis.....226 Oakwood (24)
Thegze, Mrs. George A.....7435 Olcott Ave. (23)
Trachtenberg, Mrs. Lee.....7226 Tilly Dr. (24)

Highland

(*Zip Code* 46322)

Bacevich, Mrs. A. J.....8737 Parkway Dr.
Beilke, Mrs. C. A.....8723 Parkway Dr.
Dumanian, Mrs. Ara V.....8727 Parkway Dr.
Lopez, Mrs. F.....3045 W. 45th St.
Reed, Mrs. Ronald.....2100 Kenilworth
Tilka, Mrs. E. C.....8740 Parkway Dr.
Willardo, Mrs. A. T.....8712 Idlewild

Hobart

(*Zip Code* 46342)

Bernard, Mrs. Marvin R.....6430 Grand Blvd.
Doneff, Mrs. Ronald H.....R. R. 1, U.S. 6
Glover, Mrs. W. J.....420 S. Wabash
Penn, Mrs. Robert A.....3901 E. 34th Court
Reed, Mrs. John.....445 Kelley
Stookey, Mrs. Richard.....1124 S. State St.

Munster

(*Zip Code* 46321)

Alt, Mrs. Edward M. Jr.....8804 Baring
Angel, Mrs. Virgil E.....8638 Baring
Arbeiter, Mrs. Herbert I.....119 Beverly Place
Arrowsmith, Mrs. James L.....8138 Forest Ave.
Benchik, Mrs. Frank A.....8326 Hawthorne Dr.
Bombar, Mrs. Leslie E.....8318 Oakwood
Boys, Mrs. F. F.....8517 Crestwood Ave.
Branco, Mrs. Arthur M.....8004 Monroe
Chael, Mrs. Tom C.....225 Belmont Place
Costello, Mrs. Albert J.....1404 Fisher
DePorter, Mrs. L. A.....1538 Melbrook Drive
Egnatz, Mrs. Charles D.....1436 Janice Lane
Espino, Mrs. J. C.....8523 Forest Ave.
Fleischer, Mrs. J. C.....8345 Northcote
Gardiner, Mrs. H. Glenn.....1406 McArthur
Gross, Mrs. Joseph.....1505 MacArthur

Harvey, Mrs. David M.....8013 Monroe
Hehemann, Mrs. W. V.....8718 Northcote
Hirsch, Mrs. Melvin L..Apt. 2, 8952 Whiteoak Ave.
Kelly, Mrs. G. G.....1335 Elliott Dr.
Kenney, Mrs. Francis.....8131 Forest Ave.
Kmack, Mrs. Chester J.....1705 Wilson
Kuhn, Mrs. Arthur J.....1535 35th St.
Lanman, Mrs. John U.....1321 Elliott Dr.
Lautz, Mrs. Herbert A.....7943 Forest Ave.
Long, Mrs. Keith J.....1327 Ridgeway
Madlang, Mrs. R. M.....7750 Hohman Ave.
Marks, Mrs. Salvo P.....8320 Parkview Ave.
Marshall, Mrs. W. J.....1306 Elliott Dr.
Mason, Mrs. John C.....7939 Jackson
Modjeski, Mrs. Raymond J.....1448 Elliott Dr.
Montes, Mrs. H.....7915 Hohman Ave.
Morris, Mrs. W. H., Jr.....8044 Forest Ave.
Nierman, Mrs. Murray.....1544 Fischer
Paul, Mrs. Eudell G.....7905 Hohman Ave.
Rasch, Mrs. George C.....1519 35th St.
Rosenthal, Mrs. Carl.....8330 Schrieber Dr.
Schlesinger, Mrs. Jacob.....7648 Hohman Ave.
Smith, Mrs. Jerald.....239 Fairbanks
Smitley, Mrs. Roger P.....1519 Janice Lane
Snyder, Mrs. Jerome.....1210 Park Drive
Sroka, Mrs. Stanley J.....8516 Hawthorne Dr.
Stasick, Mrs. Murray .....8611 Baring Ave.
Stevens, Mrs. Edwin W.....8627 Beech
Sweany, Mrs. S. K.....8030 Jackson
Teplinsky, Mrs. Louis.....1526 Twelve Oak Dr.
Urbanski, Mrs. W. P.....9250 Foliage Lane
Valderrama, Mrs. Hugo.....1325 MacArthur
Walker, Mrs. Adolph.....1504 Park Dr.
Wooden, Mrs. Thomas F.....8351 Crestwood

Ambrozaitis, Mrs. Kazys
35 Crest Dr., Chesterton (46304)
Angeles, Mrs. Uldarico A.....16 Shore Drive, Ogden Dunes (46368)
Dimitroff, Mrs. Lambro
1021 Forest Hills, Calumet City, Ill. (60409)
Doherty, Mrs. Raymond J.
984 W. 66th, Merrillville (46307)
Feinsot, Mrs. Irving
17 Forestdale Park, Calumet City, Ill. (60409)
Feldner, Mrs. Ronald P.
17717 Bernardine, Lansing, Ill. (60438)
Jahns, Mrs. Albin A.
110 Shore Line, Box 750, Portage (46368)
Mansueto, Mrs. Mario
4 Forestdale Park, Calumet City, Ill. (60409)
Milos, Mrs. Robert J.
151 Shore Dr., Portage (46368)
Psomatakis, Mrs. E.....189 Graymoor Lane, Olympia Fields, Ill. (60461)
Tyrrell, Mrs. J.
16041 S. Ellis, South Holland, Ill. (60473)

LaPORTE COUNTY

LaPorte

(*Zip Code* 46350)

Backer, Mrs. George P.....1533 Michigan Ave.
Datzman, Mrs. Basil J.....1421 Indiana Ave.
Durham, Mrs. Lowell J.....205 Forest Dr.
Farnsworth, Mrs. S. A.....214 Lakeshore Dr.
Feinn, Mrs. Harry S.....1534 Michigan Ave.
Kelsey, Mrs. Robert M., Jr.....1305 Indiana Ave.
Kepler, Mrs. Robert W.....1529 Michigan Ave.
Lansford, Mrs. Kenneth G.....205 Canterbury Dr.
Larson, Mrs. Goyt O.....Ridgefield Addition
Mladick, Mrs. Edward A.....314 Holton Rd.
Moore, Mrs. William G.....2203 Southwest Rd.
Mueller, Mrs. Edwin C.....117 Evergreen Dr.
Oak, Mrs. David D.....1104 Andrew Ave.
Philbrook, Mrs. Seth S.....212 Forest Dr.
Richter, Mrs. John C.....2020 Beechwood Ct.
Sanchez, Mrs. Jose.....2424 Monroe St.
Sirugo, Mrs. Aldo C.....202 Forest Dr.
Smith, Mrs. John.....1533 Weller
von Asch, Mrs. George.....2030 Michigan Ave.
Wolf, Mrs. Wm. E.....Lakewood Lair

Carter, Mrs. William D.....Walkerton (46574)
Mannion, Mrs. Rodney A.
2016 Juneway, L.B., Michigan City (46360)
Rohrer, Mrs. Bryce B.....506 Roosevelt Rd., Walkerton (46574)
Stark, Mrs. Wm..2821 Elbridge Way, Long Beach, Michigan City (46360)

LAWRENCE COUNTY

Bedford

(*Zip Code* 47421)

Austin, Mrs. Richard P.....1315 15th St.
Crosby, Mrs. Reid C.....3620 Able Ave.
Duncan, Mrs. Raymond E.....407 Northwood Dr.
Dusard, Mrs. Joseph C.....1107 N. St.
Edmonds, Mrs. Kendrick T.....438 Sycamore
Emery, Mrs. Charles B.....Brook Knoll
Fountaine, Mrs. Thomas J.....1620 18th St.
Hawkins, Mrs. Richard D.....Box 286
Kasting, Mrs. Gerald E.....Parkview Addition
Kerr, Mrs. Donald M.....1415 20th St.
Ley, Mrs. Glen D.....1303 15th St.
McPike, Mrs. Joseph D.....1103 Lincoln Ave.
Morrow, Mrs. Robert J.....R. 5, Brook Knoll
Noe, Mrs. William R.....118 Woodhill Dr.
Reuter, Mrs. John W.....405 Northwood Dr.
Scherschel, Mrs. John P.....1713 H St.
Sorrells, Mrs. George W., Jr.....212 Lori Lane
Waldo, Mrs. Guy H., Jr.....308 Eastwood Dr.
Wohlfeld, Mrs. J. B.....1224 15th St.
Woolery, Mrs. Richard H.....2020 Denson Ave.

Benham, Mrs. Lawrence E.....R. R. 2, Springville (47462)

MADISON COUNTY

Leroy, Mrs. A. G.....Alexandria (46001)

Anderson

(*Zip Code* 46011 *unless otherwise indicated*)

Aagesen, Mrs. W. J.....3 Wind Ridge Rd.
Armington, Mrs. Charles L.....823 W. Seventh St. (16)
Austin, Mrs. Charles E.....1612 Westwood Dr.
Baughn, Mrs. William L.....1517 Winding Way
Beeler, Mrs. Frank K.....20 Overlook Dr.
Bixler, Mrs. Donald P.....1611 Van Buskirk Rd.
Blassaras, Mrs. Crist A.....916 Dresser Dr.
Bowers, Mrs. Richard C.....1110 Greenway Dr.
Bridges, Mrs. Alvin L.....R. R. 2, Box 296 A
Buckles, Mrs. David L.....44 Knoll Rd.
Caudill, Mrs. Rodney.....311 W. Eighth St. (16)
Conrad, Mrs. Ernest M.. 2124 Meridian St. (14)
Denny, Mrs. Melvin H.....1103 Dresser Dr.
Doenges, Mrs. James L.....Whitehall Place
Donaldson, Mrs. Frank C.....2 Wind Ridge Rd.
Drake, Mrs. James R.....2210 W. 12th St.
Drake, Mrs. John C.....920 N. Madison Ave.
Drennen, Mrs. Robert V...1230 E. Chesterfield Dr. (12)
Dulin, Mrs. Basil B.....1120 Maryland Drive
Ellis, Mrs. Seth W.....1105 Green Way Dr.
Elsten, Mrs. Wayne A.
1333 Maryland Dr., Forest Manor
Erehart, Mrs. Archie D.....2214 W. Ninth St.
Faust, Mrs. Howard, Jr.....1321 W. Eighth St.
Ferguson, Mrs. Donald H.....3430 Redwood Rd.
Fischer, Mrs. Warren E.....1410 Van Buskirk Rd.
Gahimer, Mrs. Joseph E.....1515 Greenway Dr.
Gante, Mrs. Henry W.....2005 Nichol Ave.
Gholz, Mrs. Lawrence.....3421 Laurel Lane
Gray, Mrs. William J..805 Country Club Lane (12)
Hersler, Mrs. Benton.....13 Wind Ridge Rd.
Jarrett, Mrs. Paul.....2541 North Shore Dr.

Jones, Mrs. Albert T.....3316 Cherry Rd.
Jones, Mrs. David G.....R. R. 5, Box 187
Kelly, Mrs. Wendell C.....23 Colony Rd.
Kepner, Mrs. R. S.....909 Forest Dr.
Kiely, Mrs. John T.....1011 Raible
King, Mrs. Charles R.....6414 Rosalind Lane
King, Mrs. Joseph W.....1646 Corlett Way
Kopp, Mrs. William R.....2410 W. 12th St.
Lamey, Mrs. Paul T.....1740 W. 10th St.
Land, Mrs. Richard.....713 Winding Way
Larmore, Mrs. Joseph L.....1301 Winding Way
Litzenberger, Mrs. Sam W.....823 Forest Dr.
Long, Mrs. Paul L.....828 Dresser Dr.
Metcalf, Mrs. George B...830 W. Eighth St. (16)
Miethke, Mrs. Richard.....3324 Cherry Rd.
Moneyhun, Mrs. James E.....1815 Ivy Dr.
Morris, Mrs. Robert A.....410 Golf Club Rd.
Neale, Mrs. Alfred E.....725 Forest Dr.
Nesbit, Mrs. Leonard L.....60 River Forest
Owens, Mrs. T. F.....St. Rd. 9, South
Patterson, Mrs. William K.....3 South Park Dr.
Polhemus, Mrs. Warren C.....1300 W. 11th St.
Price, Mrs. Ambrose M..3821 St. Rd. 9, North (12)
Rosenbaum, Mrs. Lloyd E.....804 Dresser Dr.
Ross, Mrs. Guy E.....1124 N. Madison Ave.
Sheldon, Mrs. Suel A.....2812 Greenbriar Rd.
Stamper, Mrs. Jos. H..619 State Rd. 67 West (13)
Stamper, Mrs. Robert J.....R. R. 6, Box 78A
Starks, Mrs. William O.....1525 Winding Way
Stinson, Mrs. William M.....17 River Forest
Swan, Mrs. Richard C.....707 Forest Dr.
Szumilas, Mrs. Peter P...5011 Saddle Lane (14)
Taylor, Mrs. James A.....3232 Maryland Dr.
Wagoner, Mrs. John R.....3522 Hawthorne Rd.
Webb, Mrs. Harry D.....1308 Maryland Dr.
Weiss, Mrs. Louis L.....1225 N. Madison Ave.
Whitaker, Mrs. Jack D.....3235 Maryland Dr.
Wilkinson, Mrs. Roger L.....404 Central Way
Williams, Mrs. Francis M.....1012 Park Rd.
Williams, Mrs. Robert H...715 North Shore Blvd.
Wishard, Mrs. Fred B.....2604 E. 4th St. (12)
Woodbury, Mrs. C. R.....835 Park Road

Bishop, Mrs. Harry A.....Frankton (46044)
Williams, Mrs. Robert D.....Markleville (46056)
Doles, Mrs. Ted S.
613 N. 10th, Middletown (47356)
Foley, Mrs. Phillip D.....613 N. 10th St., Middletown (47356)
Reynolds, Mrs. Ralph E.....603 N. Ninth St, Middletown (47356)
Begley, Mrs. Robert W.
R. R. 2, Box 220-A, Pendleton (46064)
Benedict, Mrs. Harold G.
222 W. State St., Pendleton (46064)
McLaughlin, Mrs. C. B..R. R. 2, Pendleton (46064)
Van Ness, Mrs. William.216 S. Main, Summitville (46070)

MARION COUNTY

Duncan, Mrs. Stuart J.....1005 Churchman Ave., Beech Grove (46107)
Ramage, Mrs. Walter F.....244 S. First St., Beech Grove (46107)
Link, Mrs. Goethe.....Box 84, Brooklyn (46111)
Cuthbert, Mrs. Marvin P..R. R. 2, Box 386, Carmel (46032)
Foster, Mrs. Lee N.....428-A Smokey Rd., R. R. 2, Carmel (46032)
Freeman, Mrs. Max E.....445 Smoky Rd., Carmel (46032)
Harris, Mrs. James C.....10816 Jordan Road, R. R. 1, Box 622Q, Carmel (46032)
Hasewinkel, Mrs. Carroll W.
R. R. 2, Box 354, Carmel (46032)
Karsell, Mrs. William A.....10518 Hussey Lane, Carmel (46032)
MacDougall, Mrs. John D.....R. R. 1, Box 170-B, Westfield (46074)
Megenhardt, Mrs. Dennis S.....R. R. 1, Box 5, Carmel (46032)
Nolin, Mrs. Richard T..R. R. 2, Box 323D, Carmel (46032)
Schaffer, Mrs. Edward V.....Box 614-A, R. R.1, Carmel (46032)
Onyett, Mrs. Harold R..R. R. 3, Box 32, Greenwood (46142)

Indianapolis
(*Zip Code* 462 *plus zone number*)

A

Aldrich, Mrs. Harry D.....5805 Sherman Dr. (20)
Alig, Mrs. Vincent B.....6453 Green Leaves (20)
Allen, Mrs. Robert K.....737 Sherwood Dr. (40)
Alvis, Mrs. David.....7758 Kenworthy Dr. (60)
Alvis, Mrs. Edmond O.....474 W. 92nd St. (60)
Anshutz, Mrs. William M..6340 Braemore Rd. (20)
Antreasian, Mrs. Berj.....5465 Mark Lane (26)
Appel, Mrs. Richard H.....122 E. 61st St. (20)
Applegate, Mrs. Geo. W...7661 Harcourt Rd. (60)
Arbogast, Mrs. John L. 3933 Washington Blvd. (5)
Asher, Mrs. Ernest O.....4640 W. 71st St. (68)
Asher, Mrs. James W.....R. R. 16, Box 355 (78)
Ashwood, Mrs. Edward.....1936 Colt Rd. (27)
Avery, Mrs. George O...5321 N. Kessler Blvd. (8)

B

Bachmann, Mrs. Arnold J.....1615 Oles Drive (8)
Bakemeier, Mrs. Otto H..5535 E. St. Clair St. (19)
Bakemeier, Mrs. Robert E.
6037 Castlebar Circle (20)
Baker, Mrs. Charles R.....4819 Alameda Rd. (08)
Balch, Mrs. James E.....6829 Willow Rd. (20)
Balch, Mrs. James F., Jr....5826 Sylvan Dr. (08)
Ball, Mrs. Joseph E.....6612 E. Ninth St. (19)
Baptisti, Mrs. Arthur, Jr....600 N. Alabama (4)
Barden, Mrs. Tom P.
4104 Melbourne Rd., S. Dr. (8)
Bastnagel, Mrs. William F.
5430 Washington Blvd. (20)
Batman, Mrs. Gordon W.
6906 N. Delaware St. (20)
Battersby, Mrs. J. Stanley..6001 Sunset Lane (8)
Bauer, Mrs. Thomas B...7685 Clarendon Rd. (60)
Baumeister, Mrs. Herbert E. ...4421 E. 75th (50)
Baxter, Mrs. John P. ..7247 Whitehall Dr. (26)
Beasley, Mrs. Thos. J.....715 E. 70th Place (20)
Beaver, Mrs. Howard W.
303 E. Edgewood Ave. (27)
Beck, Mrs. Evart M.....6445 N. Olney St. (20)
Becker, Mrs. Harry G...5641 Haverford Ave. (20)
Beeler, Mrs. John W.....7974 N. Illinois St. (60)
Beeler, Mrs. Raymond C. ..3777 N. Meridian (8)
Belt, Mrs. James H.....8652 Emerald Lane (60)
Benedict, Mrs. Paul F.....2550 Blue Grass Dr. (8)
Bennett, Mrs. Ivan F.....R. R. 18, Box 285 (24)
Berman, Mrs. J. K.....2810 W. 38th St. (8)
Bibler, Mrs. Lester D.
4360 N. Pennsylvania St. (5)
Blatt, Mrs. A. Ebner....5330 N. Illinois St. (8)
Boling, Mrs. Fred F..3333 Melbourne Rd. S. Dr. (8)
Boling, Mrs. Grover C., Jr.
6205 Bramshaw Rd. (20)
Bomalaski, Mrs. Donald....6491 N. Oxford (20)
Booth, Mrs. Boynton H...5735 Braewick Rd. (26)
Bowman, Mrs. George W.
5634 Carrollton Ave. (20)
Boyer, Mrs. Floyd A.....136 S. Wittfield St. (19)
Brady, Mrs. Thomas A., Jr.
225 Wellington Rd. (60)
Brayton, Mrs. John R.
3128 E. Fall Creek Blvd., N. Dr. (5)
Brayton, Mrs. Lee.....5540 N. Illinois St. (8)
Brickley, Mrs. Richard A.
4530 Crooked Creek Ridge Dr. (08)
Brillhart, Mrs. James R.....4420 E. 75th St. (50)
Brodie, Mrs. Donald W....R. R. 13, Box 397 (36)
Brooks, Mrs. Fred.....1660 Cunningham Dr. (24)

Brown, Mrs. Archie E.
4145 Melbourne Rd., W. Dr. (8)
Brown, Mrs. David E....7344 Lakeside Dr. (78)
Brown, Mrs. DeWitt W., Jr.
4363 Cold Springs Rd. (8)
Brown, Mrs. Earl R., Jr.
5450 Channing Rd. (26)
Brown, Mrs. Gordon T.....8170 Oakland Rd. (40)
Brown, Mrs. Wendell E.....3750 N. Gale St. (18)
Browning, Mrs. James S.
7961 Windcombe Blvd. (40)
Bruce, Mrs. Reginald A...5273 N. Illinois St. (08)
Brueckmann, Mrs. F. Robert
5280 Channing Rd. (26)
Burdette, Mrs. Harold....6310 Glencoe Dr. (60)
Butler, Mrs. John O.....5528 Manker Ave. (27)
Butler, Mrs. Robert M...4849 N. Ritter Ave. (26)

C

Cahn, Mrs. Hugo....5535 N. Pennsylvania St. (20)
Cahn, Mrs. Peter H.....7025 Hoover Rd. (60)
Call, Mrs. Herbert F.....710 E. 57th St. (20)
Campbell, Mrs. H. E., Jr.
7650 Spring Mill Rd. (60)
Campbell, Mrs. Richard W.
6834 Mohawk Lane (60)
Campbell, Mrs. Robert L....8990 W. 82nd St. (78)
Caputi, Mrs. Saverio..5115 N. Meridian St. (8)
Carson, Mrs. Wayne..7177 N. Meridian St. (40)
Chattin, Mrs. William R.
4825 Cavendish Rd. (20)
Chernish, Mrs. Stanley M...4403 Radnor Rd. (26)
Christie, Mrs. Marvin C.
3340 E. Loretta Drive (27)
Clark, Mrs. Geo. A.....620 Forest Blvd. (40)
Clark, Mrs. Lawson J.
2425 E. Kessler Blvd., E. Dr. (20)
Coggeshall, Mrs. Warren E.
6305 Bramshaw Rd. (20)
Conway, Mrs. Glenn.....2235 E. Garfield Dr. (3)
Cortese, Mrs. James V.....6302 Minlo Dr. (27)
Cortese, Mrs. Thomas A.....3525 Payne Dr. (27)
Costin, Mrs. Robert L..8028 Morningside Dr. (40)
Countryman, Mrs. Frank 5633 Central Ave. (20)
Cross, Mrs. David G.....3001 Redfern Dr. (27)
Culbertson, Mrs. Clyde G.....6060 Park Ave. (20)
Cure, Mrs. Charles W...414 W. Kessler Blvd. (08)
Currie, Mrs. Robert W.....512 E. 57th St. (20)
Curry, Mrs. R. Louis.....7250 N. Chester (40)

D

Daley, Mrs. Edward H.
5118 East Dickson Road (26)
Dallas, Mrs. F. R.....3649 E. 71st St. (20)
Dalton, Mrs. Wm. W.....4205 Otterbein Ave. (27)
Daly, Mrs. Joseph M.....5969 Singleton Ave. (27)
Davidson, Mrs. N. Cort....2811 W. 96th St. (68)
Davis, Mrs. Bennie L...302 W. Hampton Dr. (08)
Davis, Mrs. Sam J.....4545 Broadway (5)
Dearmin, Mrs. Robert M..6616 Spring Mill Rd. (60)
DeArmond, Mrs. Albert M.
5401 N. Delaware St. (20)
Deever, Mrs. John W.....6801 S. East St. (27)
Denny, Mrs. James W.
6633 Spring Brook, N. Dr. (19)
DeWester, Mrs. Gerald M.
2802 Lindbergh Dr. (27)
Dill, Mrs. Charles W.....4111 S. Sherman Dr. (27)
Dillon, Mrs. John F.....310 Pine Dr. (27)
Dino, Mrs. Florian S.
7332 Country Brook Dr. (60)
Dolan, Mrs. Patrick A.....4905 Knollton Rd. (8)
Donahue, Mrs. James....945 Spannwood Rd. (08)
Donato, Mrs. Albert M...5915 Lawrence Dr. (26)
Doran, Mrs. J. Hal.....3705 N. Denny St. (18)
Doughty, Mrs. Samuel R...5258 Channing Ct. (26)
Douglas, Mrs. William T.
5737 Wildwood Ave. (20)
Dryden, Mrs. Gale E...5835 N. Tacoma Ave. (20)
Dugan, Mrs. William M.
5747 Rolling Ridge Rd. (20)
Dugan, Mrs. William ..7521 Mohawk Lane (60)
Dunkin, Mrs. Ramon S.....5916 Lieber Rd. (8)
Dyar, Mrs. Edwin W., Jr.....120 Arden Dr. (20)
Dyar, Mrs. Robert W.....6343 Maple Dr. (20)
Dyke, Mrs. Richard W.....542 W. 83rd (60)

E

Eaton, Mrs. Edwin R.
7334 Glenview, W. Dr. (50)
Eaton, Mrs. Lyman D...R. R. 19, Box 487Y (80)
Ebert, Mrs. J. Wayne....1125 Southview Dr. (27)
Egbert, Mrs. Herbert L.....419 W. 63rd St. (60)
Eicher, Mrs. Palmer O. 4401 Washington Blvd. (5)
Eldridge, Mrs. Gail E.....6377 Sunset Lane (60)
Elkins, Mrs. James P.....2045 Lick Creek Dr. (3)
Ellis, Mrs. Bert E.....3910 E. 57th St. (20)
Ellis, Mrs. Charles R.....7607 Harcourt Rd. (60)
Ellis, Mrs. William N.....4908 E. 46th Street (26)
Emhardt, Mrs. John T.....3305 Brill Rd. (27)
Everly, Mrs. Ralph V.....1105 E. 58th St. (20)
Everly, Mrs. Stephan S...1929 N. Senate Ave. (2)

F

Fausset, Mrs. C. Basil..7757 N. Meridian St. (60)
Feeney, Mrs. Martin T.....2302 E. 57th St. (20)
Ferry, Mrs. Francis A...935 E. Southern Ave. (3)
Finneran, Mrs. Joseph C.....1250 E. 80th St. (40)
Fischer, Mrs. A. Alan.....2515 Knollwood Dr. (8)
Flanders, Mrs. Robert, Jr.
7232 Sylvan Ridge Rd. (40)
Flanigan, Mrs. Meredith B. 3305 Rutledge Dr. (8)
Flora, Mrs. Joseph O.....5604 Rockville Rd. (24)
Folkening, Mrs. Norval C.....5501 Camden (27)
Fortuna, Mrs. Frank.....2535 E. Banta Rd. (27)
Fouts, Mrs. Paul J.....8393 N. Illinois St. (60)
Franklin, Mrs. William L.....33 E. 37th St. (5)
Franz, Mrs. Sherman G...3714 N. Kiel Ave. (24)
Freed, Mrs. Carl A.....4334 Springwood Trail (8)
Freeman, Mrs. Leslie W...5601 E. St. Clair (19)
French, Mrs. Richard N., Jr.
3025 Green Hills Lane, S. Dr. (22)
Fry, Mrs. Robert D.....5717 Broadway (20)
Fugelso, Mrs. Erling S.....4230 Lincoln Rd. (08)
Fulton, Mrs. William H.
1934 Remington Dr. (27)
Funkhouser, Mrs. A. G.....215 E. 36th (5)

G

Gabovitch, Mrs. Edward R. 595 Holiday Lane (60)
Gaddy, Mrs. Nelson D.....4506 Sylvan Rd. (40)
Gambill, Mrs. William D..2272 Wynndale Rd. (08)
Garber, Mrs. J. Neill..7036 N. Pennsylvania (20)
Garceau, Mrs. George J.
5539 N. Pennsylvania St. (20)
Gardiner, Mrs. Sprague H...330 W. 62nd St. (60)
Gardner, Mrs. Austin
7701 N. Pennsylvania St. (40)
Gardner, Mrs. Buckman
530 Willow Spring Rd. (40)
Garner, Mrs. W. Stanley.5209 Brief Run Dr. (26)
Garrett, Mrs. Robert A...95 Wellington Rd. (60)
Gastineau, Mrs. Frank M.
2926 Lakeshore Dr., Apt. A (05)
Geider, Mrs. Roy A.
5816 Pleasant Run Pkwy., N. Dr. (19)
Geisler, Mrs. Hans E...7085 N. Pennsylvania (20)
Gick, Mrs. Herman H.....451 Eastern Ave. (1)
Gifford, Mrs. Fred E...5125 N. Meridian St. (8)
Gillespie, Mrs. Charles F..4530 Berkshire Rd. (26)
Gillespie, Mrs. Jacob E.....4426 Broadway (5)
Girod, Mrs. Donald A..3515 Melbourne Circle (08)
Goldman, Mrs. Samuel....428 Woodmere Dr. (60)
Gormley, Mrs. Joseph J.
4560 Crooked Creek Ridge Dr. (8)
Gosman, Mrs. James H.
4491 Washington Blvd. (5)
Graham, Mrs. Edward W.
6036 Riverview Dr. (08)
Graham, Mrs. John D...6315 Old Orchard Rd. (26)

Gray, Mrs. Howard R....8341 Stafford Lane(20)
Grayson, Mrs. Ted L.....8163 Round Hill Ct. (60)
Greene, Mrs. Morgan E.
2014 Winchester Dr. (27)
Greist, Mrs. John H.
4343 Washington Blvd. N. (5)
Griffin, Mrs. Leslie.....3203 W. 57th St. (8)
Griffith, Mrs. Richard S.
2002 Cunningham Rd. (24)
Grisell, Mrs. Ted L...5211 Brendon Ridge Rd. (26)
Grosz, Mrs. Hanus J.....4054 Sawyer St. (26)
Gruber, Mrs. Charles M., Jr.
3102 Kessler Blvd., E. Dr. (20)
Gustafson, Mrs. Gerald S.
5768 N. Pennsylvania St. (20)

H

Habegger, Mrs. E. Dale....3120 W. 51st St. (8)
Hackney, Mrs. Victor D....5262 Olympia Dr. (08)
Hadley, Mrs. David.5601 N. Pennsylvania St. (20)
Haggard, Mrs. Edmund B.
5914 N. Emerson Ave. (20)
Hall, Mrs. Frank M.
8633 N. Pennsylvania St. (40)
Hall, Mrs. Jack H.....5960 Braewick Rd. (26)
Hamilton, Mrs. Howard B.
3425 Green Hills Overlook (22)
Hampshire, Mrs. Donald R.
7979 Morningside Dr. (40)
Hann, Mrs. E. Carl ...5218 Laurel Hall Dr. (26)
Hanna, Mrs. Thomas A.....5009 W. 15th St. (24)
Harcourt, Mrs. Allan K.
5418 Allisonville Rd. (20)
Harcourt, Mrs. Robert S...6408 Braemore Rd. (20)
Harding, Mrs. M. Richard.5440 Channing Rd. (26)
Harger, Mrs. Robert W...46 West 52nd Street (8)
Hartenbower, Mrs. David L.
734 E. Pleasant Run Pkwy., N. Dr. (03)
Haslinger, Mrs. Clarence J.
5024 LeMans Dr. (5)
Hatfield, Mrs. Nicholas W...5851 E. 54th Pl. (26)
Hawk, Mrs. James H.....400 E. 43rd St. (5)
Haymond, Mrs. Joseph L.
2745 Crescent Hill Lane (8)
Haynes, Mrs. John T.....4616 Cherry Lane (08)
Hays, Mrs. Everett L.....2607 Manker Ave. (3)
Healey, Mrs. Robert J.
5559 Washington Blvd. (20)
Helmen, Mrs. Charles H.....5269 Roland Dr. (08)
Heimburger, Mrs. Robert F.
4462 Central Ave. (20)
Helmer, Mrs. O. M.....5015 N. Illinois St. (8)
Hendricks, Mrs. Fred A..5867 N. New Jersey (20)
Henry, Mrs. R. S.....4367 Lincoln Rd. (8)
Hepburn, Mrs. Charles K.
7570 Morningside Dr. (40)
Hickman, Mrs. Jack W.
3736 Spring Hollow Rd. (8)
Hickman, Mrs. Walter F...599 W. Westfield (08)
Hill, Mrs. Herbert..4422 Melbourne, W. Dr. (8)
Hill, Mrs. James K.....2507 Bluffwood Dr. (8)
Himelstein, Mrs. N. Harvey
5475 N. Alton Ave. (8)
Hogan, Mrs. Michael A.
7330 Steinmeier Dr. (50)
Holman, Mrs. Jerome E., Jr.
5930 Central Ave. (05)
Hood, Mrs. Ainslee A...1810 Rosedale Drive (27)
Hoog, Mrs. John M.....2632 Maynard Dr. (27)
Hopkins, Mrs. Bruce J.....2521 N. Winfield (22)
Howell, Mrs. Joseph D.....4514 E. 79th St. (50)
Hoyt, Mrs. Millard L...5725 Hunterglen Rd. (26)
Hubbard, Mrs. Jesse D.....4330 Black Oak Dr. (8)
Hudson, Mrs. Foster J.....3865 Cheviot Pl. (18)
Hull, Mrs. DeWayne L.....4046 N. Sheridan (26)
Hull, Mrs. Ronald H.....6252 Bramshaw Rd. (20)
Hurteau, Mrs. William W...201 West 75th St. (60)
Huse, Mrs. Wm. Murray
5131 N. Pennsylvania St. (5)

I-J

Irwin, Mrs. Glenn W., Jr. 8025 N. Illinois St. (60)
Iske, Mrs. Paul G.....5207 Central (20)
James, Mrs. C. E..4504 Hidden Orchard Lane (8)
Jewett, Mrs. Joe H.....5803 Sherman Ave. (20)
Jinks, Mrs. Clifford H.....1831 E. 61st St. (20)
Johnson, Mrs. Earl H...550 W. 77th St. N. Dr. (60)
Johnson, Mrs. Thomas W.....351 W. 63rd St. (60)
Jones, Mrs. David E...5433 Hawthorne Dr. (26)
Jones, Mrs. George..8933 Southeastern Ave. (39)
(Wanamaker)
Joseph, Mrs. Rex M.....620 Hickory Lane (27)
Jowitt, Mrs. Richard H.
5390 Brendonridge Rd. (26)
Joyner, Mrs. John E.....3417 Kinnear (18)
Judd, Mrs. Russell L.....5327 Mark Lane (26)

K

Kaiser, Mrs. James L.....333 E. Beverly Dr. (5)
Kammen, Mrs. Leo.....7030 Central Ave. (20)
Katterjohn, Mrs. James C.
9035 Pickwick Dr. (60)
Keenan, Mrs. George B.
2015 E. Thompson Rd. (27)
Keever, Mrs. Charles H., Sr.
9016 Keever Dr., R. R. 18, Box 289 B (24)
Kendrick, Mrs. Wm. M...735 Round Hill Rd. (60)
Kennedy, Mrs. Hunter F....5790 E. Michigan (19)
Kennedy, Mrs. Joseph T.
5316 Brendonridge Rd. (26)
Kenney, Mrs. David B.....6711 E. Tenth St. (19)
Kenzler, Mrs. Jack I.....6040 E. 65th Place (20)
Kerr, Mrs. Harry R...5774 Washington Blvd. (20)
King, Mrs. Harold K...5430 Channing Rd. (26)
Kingsbury, Mrs. John K.
5776 E. Michigan St. (19)
Kirtley, Mrs. William R...7447 N. Park Ave. (40)
Kissel, Mrs. Wesley A...3721 Briarwood Dr. (40)
Kitterman, Mrs. Harry E.
5108 Graceland Ave. (08)
Klain, Mrs. Benjamin V.
8419 N. Pennsylvania St. (40)
Kleopfer, Mrs. Ronald G.....6216 Brookline (20)
Klutinoty, Mrs. George.2275 Wynnedale Rd.(8)
Kneidel, Mrs. J. H.....918 E. 57th St. (20)
Knowles, Mrs. Charles Y...5420 Channing Rd. (26)
Kohlstaedt, Mrs. Kenneth G...645 E. 80th St. (40)
Kooiker, Mrs. John E.....3540 Watson Road (5)
Koons, Mrs. Karl M.
5767 N. Pennsylvania St. (20)
Kornafel, Mrs. Laddie H...6201 College Ave. (20)
Kremp, Mrs. Richard E.
7848 New Augusta Rd. (68)
Kwitny, Mrs. I. V.....3948 Rue Renior (20)

L

LaDine, Mrs. Clarence B...5417 N. Meridian (8)
Lamb, Mrs. Emmett B...1180 Golden Hill Dr. (8)
Lamb, Mrs. Russell W....4636 N. Capitol Ave. (8)
Lamber, Mrs. Chet
3965 N. Meridian, Apt. 4D (8)
Lang, Mrs. Jay W.....54 S. Johnson Ave. (19)
Lasich, Mrs. Anthony R....5320 Channing Rd. (26)
Lawrence, Mrs. Gene C.
1929 N. Senate Ave., Apt. 40 (02)
Leasure, Mrs. J. Kent.....5823 Brockton Dr. (20)
Leff, Mrs. A. H.....160 Penn Ridge Dr. (40)
Leffler, Mrs. William T.....250 E. 70th St. (20)
Lehman, Mrs. Evan L.
1925 N. Senate Ave., Apt. 28 (02)
LeMaster, Mrs. Theodore R.
5257 Hedgerow Dr. (26)
Leser, Mrs. Ralph U.....5434 Ashurst St. (20)
Levi, Mrs. Leon....6902 N. Pennsylvania St. (20)
Lewis, Mrs. Paul S.....6380 W. Ohio St. (24)
Lewis, Mrs. Robert J...5800 Lawrence Dr. (26)
Lichtenberg, Mrs. Melvin
8520 Canterbury Sq. East Apt. A. (60)

Lindenborg, Mrs. Paul G...5417 Farhill Ct. (26)
Lingeman, Mrs. Raleigh E.
4235 N. Pennsylvania (5)
Loehr, Mrs. Wm. M...1426 E. Kessler Blvd. (20)
Lord, Mrs. Glenn C.....7437 Holliday Dr. W. (60)
Love, Mrs. George N. 5331 Washington Blvd. (20)
Lowe, Mrs. John C.....6007 Arlington Court (26)
Lukemeyer, Mrs. George T.
3845 N. Campbell Ave. (26)
Lunsford, Mrs. Thomas E.....215 E. 71st St. (20)
Luros, Mrs. J. Theodore....156 Fairway Dr. (60)
Lybrook, Mrs. William B.
4585 Kessler Blvd., E. Dr. (20)

M

McAlpine, Mrs. Richard J...8102 Oak Hill Dr. (50)
McAree, Mrs. Francis E.
5521 Overbrook Circle (26)
McBride Mrs. James S.....720 E. 80th St. (40)
McCallum, Mrs. Robert N..7618 Woodside Dr. (60)
McCartney, Mrs. Donald H. 410 East 56th St. (20)
McClain, Mrs. Edwin S.
416 W. 77th St. (60)
McCormick, Mrs. Charles O., Jr.
4240 Glencairn Lane (26)
McDougal, Mrs. Robert A.
5339 Hedgerow Dr. (26)
McGrath, Mrs. Michael F.
6183 Washington Blvd. (20)
McIntyre, Mrs. James M.
7360 Hazelwood Ave. (60)
McNutt, Mrs. Cyrus C...2315 Bishoff Dr., #3 (07)
Mackey, Mrs. John E.....940 W. 58th St. (8)
Madden, Mrs. Robert J.....1420 Audubon Rd. (19)
Manalan, Mrs. Maurice M.
7807 Meadowbrook Dr. (40)
Manion, Mrs. Marlow W.
5132 N. New Jersey St. (5)
Manning, Mrs. Randolph
202 E. 75th St. (40)
Marks, Mrs. John S., Jr.
700 N. Ala. Riley Center (04)
Marshall, Mrs. Albert L., Jr.
7802 Allisonville Rd. (50)
Marshall, Mrs. Cavins R...4103 N. Illinois St. (08)
Martz, Mrs. Carl D.....7926 Hawthorne Ct. (26)
Masters, Mrs. John M.....34 E. 46th St. (5)
Masters, Mrs. Robert J.....330 W. 106th St. (90)
Matthew, Mrs. W. Burleigh
800 W. Kessler Blvd. (8)
Matthews, Mrs. B. J.....966 North Graham (19)
Matthews, Mrs. William M.
5215 Knob Lane (26)
Maxam, Mrs. Beverly T. 6220 Sunset Lane (60)
Maxwell, Mrs. Sam B...7433 Irvington Ave. (50)
Meiks, Mrs. Lyman T.
4203 N. Pennsylvania St. (5)
Melin, Mrs. John R.....2628 Knollwood Dr. (8)
Mericle, Mrs. Earl W. 8455 Washington Blvd. (40)
Mertz, Mrs. John H. O.
4725 Kessler Blvd., N. Dr. (8)
Michael, Mrs. Isaac E.....5208 Roland Dr. (8)
Middleton, Mrs. H. N...3828 Rookwood Ave. (8)
Miller, Mrs. Jerry R...7237 Sylvan Ridge Rd. (40)
Miller, Mrs. John D.....6255 Sunnyside Rd. (26)
Miller, Mrs. Lee H...5441 Brendonridge Rd. (26)
Miller, Mrs. Roscoe E...R. R. 16, Box 346-A (78)
Mitchell, Mrs. Earl N.
1222 N. Irvington Ave. (19)
Moak, Mrs. Glenn D.....2155 Weslynn Dr. (8)
Montgomery, Mrs. W. F.....4546 Park Ave. (5)
Moore, Mrs. Donald F. 1315 West 10th Street (7)
Moore, Mrs. Harold T...5802 Allisonville Rd. (20)
Moran, Mrs. William J...4409 Brookline Pl. (20)
Morchan, Mrs. Samuel.....7007 Broadway (20)
Moriarty, Mrs. John.....6130 Smock Dr. (27)
Morrison, Mrs. Lewis E., II
5751 Wildwood Ave. (20)
Morton, Mrs. Joseph L.....3272 W. 42nd St. (8)
Morton, Mrs. Walter P.
3434 E. Fall Creek Blvd., N. Dr. (5)
Moss, Mrs. H. C.....4802 Washington Blvd. (5)
Mothersill, Mrs. Mark H.....3650 College Ave. (5)
Mouser, Mrs. Robert W.
5555 N. Meridian St. (8)
Muller, Mrs. Lullus P.
5675 Washington Blvd. (20)
Muller, Mrs. Paul F...4050 Washington Blvd. (5)

N

Nagan, Mrs. Robert F.....3902 Devon Dr. (26)
Nay, Mrs. Richard M.....5525 N. Meridian (8)
Need, Mrs. Louis T.....3627 Bluff Rd. (17)
Need, Mrs. R. L.....3905 Byrd Dr. (27)
Nester, Miss Lena Laura
5324 N. Pennsylvania St. (20)
Nie, Mrs. Louis W...3525 Delaware Commons (20)
Nohl, Mrs. John M.....5410 Eastridge Dr. (19)
Nolan, Mrs. Robert B...5616 N. Pennsylvania (20)
Norris, Mrs. Max S.....8899 Pickwick Dr. (60)
Nourse, Mrs. Myron H.
8064 Morningside Dr. (40)
Nugent, Mrs. Edwin J...6840 N. Delaware St. (20)
Nurnberger, Mrs. John I.
5215 Washington Blvd. (20)

O

O'Brian, Mrs. Earl J.
4525 Crooked Creek Ridge Rd. (8)
Ochsner, Mrs. Harold C.
4565 Cold Spring Rd. (8)
Offutt, Mrs. Andrew C. 750 N. Campbell Ave. (19)
Olvey, Mrs. Ottis N.....5428 Central Ave. (20)
Otten, Mrs. Claude F..5222 Washington Blvd. (20)
Overley, Mrs. Toner M., Jr...3501 Watson Rd. (5)
Owen, Mrs. John E.....4429 N. Illinois St. (8)
Owens, Mrs. Tracy C.....2823 N. Meridian St. (8)

P

Palmer, Mrs. Harley P.....6611 Hythe Rd. (20)
Parks, Mrs. Herbert E..1641 N. Priscilla Ave. (18)
Parr, Mrs. Robert L.....4407 Dickson Rd. (26)
Pantzer, Mrs. John G., Jr.
4114 Sunmeadow Lane (8)
Paulissen, Mrs. George T.....741 Markwood (27)
Paynter, Mrs. Morris B...115 Roberts Rd. (17)
Peck, Mrs. Franklin B., Jr.
8181 Lincoln Blvd. (40)
Peck, Mrs. Franklin E., Sr.,
5738 Brockton Dr. (20)
Peirce, Mrs. James D.
5027 Washington Blvd. (5)
Permer, Mrs. Erwin...6114 Carvel, Apt. B-1 (20)
Peters, Mrs. Robert J. D.
3203 E. Michigan St. (1)
Petranoff, Mrs. Theodore V.
2814 Questend—S. Dr. (22)
Pickett, Mrs. Robert D...4713 Millersville Rd. (26)
Pierce, Mrs. Emmett....1034 N. Bolton Ave. (19)
Pile, Mrs. Stafford, W., Jr.
9469 Compton Ave.(40)
Pittman, Mrs. John N.....136 E. 43rd St. (5)
Popplewell, Mrs. Arvine G.
141 E. Southport Rd. (27)
Powell, Mrs. Richard C...5359 Hedgerow Dr. (26)
Price, Mrs. Francis W.
550 East Edgewood Ave. (27)
Price, Mrs. Walter S..8430 Washington Blvd. (40)
Pryor, Mrs. Richard C.
5016-F Allisonville Rd. (05)

R

Rabb, Mrs. Frank M.....4619 Dickson Rd. (26)
Raber, Mrs. Robert M.....265 Williams Ct. (60)
Rader, Mrs. George S.....3778 E. 62nd St. (20)
Rafalski, Mrs. Thomas A.
3135 Shady Grove Court (22)

Ragan, Mrs. William D...2157 Wilshire Road (8)
Ramsey, Mrs. Frank B.....1401 W. 52nd St. (8)
Randall, Mrs. T. A.....1019 W. 75th St. (60)
Ransburg, Mrs. Robert..7614 Woodside Dr. (60)
Rapp, Mrs. George F.....650 E. 80th St. (40)
Reed, Miss Ann.....4131 N. Meridian (8)
Reed, Mrs. Philip B.....4131 N. Meridian St. (8)
Reed, Mrs. Thomas E.....5417 Boxbury Rd. (22)
Rees, Mrs. Russel C..1010 Charleston, W. Dr. (19)
Reid, Mrs. Charles A.....6506 Madison Ave. (27)
Reitz, Mrs. Lawrence A.....5250 Roland Dr. (8)
Rice, Mrs. Raymond D.
5241 Washington Blvd. (20)
Rice, Mrs. Raymond M.
7799 E. Holliday Drive (60)
Rice, Mrs. Ronald B...5251 Washington Blvd. (20)
Rich, Mrs. Richard.....5236 Hedgerow Dr. (26)
Ridolfo, Mrs. Anthony S.....6139 Maren Dr. (24)
Robb, Mrs. John A...5151 N. Pennsylvania St. (5)
Rochlin, Mrs. I.....212 E. 71st St. (20)
Roesch, Mrs. Ryland....5439 Shorewood Dr. (20)
Rogers, Mrs. Donald L.
2618 Bluffwood Dr., W. (8)
Roll, Mrs. John W.....6340 Bramshaw (20)
Roller, Mrs. Charles W.....2301 Garfield Dr. (3)
Romberger, Mrs. Floyd T., Jr..10 W. 64th St. (60)
Rosenak, Mrs. Bernard D.
5254 N. Delaware St. (20)
Ross, Mrs. Alexander T. 6050 Knyghton Rd. (20)
Ruddell, Mrs. Keith R..1201 Golden Hill Drive (8)
Rudesill, Mrs. Robert L. 5311 N. Pennsylvania (20)
Rupel, Mrs. Ernest.....5735 N. Meridian (8)
Rust, Mrs. R. B., Jr.....6640 Sunny Lane (20)
Ruth, Mrs. Martin L.....7 N. Colorado Dr. (1)
Ryan, Mrs. Glen V.
3168 E. Fall Creek Pkwy., N. Dr. (5)

S

Sage, Mrs. Russell A...7531 Morningside Dr. (40)
Sanders, Mrs. Fred....6154 Forest View Dr. (08)
Sappenfield, Mrs. Ralph S.....7102 Dean Rd. (40)
Schechter, Mrs. John S...6333 Glen Coe Dr. (60)
Schlaegel, Mrs. T. F.....4536 Dickson Rd. (26)
Schlegel, Mrs. Donald M.....4042 Cranbrook (40)
Schmalhausen, Mrs. A. W.
6227 Hillcrest Lane (20)
Schmidt, Mrs. Loren F..5880 Carrollton Ave. (20)
Schneider, Mrs. Carl J.....340 N. Kenyon (19)
Schneider, Mrs. Paul A.....4140 N. Graham (26)
Schnute, Mrs. Richard 5460 Broadmoor Plaza (8)
Schuchman, Mrs. Gabriel..5944 Central Ave. (20)
Schuster, Mrs. Dwight.4503 Washington Blvd. (5)
Scofield, Mrs. John B.....9014 Pickwick (60)
Scott, Mrs. Jasper P.....5840 Winthrop Ave. (20)
Scott, Mrs. John R.....7966 N. Illinois St. (20)
Scott, Mrs. Robert P.
5715 N. Pennsylvania St. (20)
Seaman, Mrs. Charles F. 5353 Channing Rd. (26)
Sedam, Mrs. Herbert L. 4819 Millersville Rd. (26)
Segar, Mrs. William E.....4855 Victoria Rd. (8)
Sellmer, Mrs. George.....8760 Driftwood (40)
Sexson, Mrs. Hiram T...5455 N. Meridian St. (8)
Shafer, Mrs. Marion R. 6290 Allisonville Rd. (20)
Shapiro, Mrs. Burton J. 525 Woodmere Dr. (60)
Shipley, Mrs. Edward C.....3601 Marrison Pl. (5)
Shullenberger, Mrs. Wendell A.
4535 Central Ave. (5)
Shumacker, Mrs. Harris B., Jr.
6834 N. Pennsylvania St. (20)
Sicks, Mrs. Okla W.....607 E. 82nd (40)
Siderys, Mrs. Harry
5102 N. Pennsylvania St. (5)
Siersdorfer, Mrs. T. N...5559 W. Morris St. (41)
Sigmond, Mrs. Harvey..3245 N. Pennsylvania (5)
Silver, Mrs. Richard...1114 Frederick Dr. S. (60)
Sims, Mrs. J. Lawrence....3723 N. Gale St. (18)
Sluss, Mrs. David.....3657 Washington Blvd. (5)
Smith, Mrs. E. Rogers.....160 W. 47th St. (8)
Smith, Mrs. Roy Lee..1427 West Stop 11 Rd. (17)
Sobat, Mrs. William....1906 N. Capitol Ave. (2)
Solomon, Mrs. Reuben A.
5330 N. Pennsylvania (20)
Soper, Mrs. Hunter A.....R. R. 18, Box 285C (34)
Sovine, Mrs. Joe W.....8182 N. Illinois St. (60)
Spahr, Mrs. John F., Jr.
3014 Green Hills Lane, N. Dr. (22)
Sparks, Mrs. Alan L.
5466 N. Pennsylvania St. (20)
Spears, Mrs. John M.....6910 Shelby (27)
Speckman, Mrs. Glenn H.....5242 Park Ave. (20)
Sputh, Mrs. Carl B., Jr.
5671 Rolling Ridge Rd. (20)
Stansbury, Mrs. Wm. E.....5610 E. 16th St. (18)
Stayton, Mrs. Chester A., Sr...6931 Central (20)
Stephens, Mrs. Donald E.....5555 Broadway (20)
Stoelting, Mrs. V. K.....4706 Laurel Circle (26)
Stone, Mrs. Alvin T.....6295 N. Tuxedo (20)
Stone, Mrs. David.....5453 Ashurst (20)
Storey, Mrs. D. Edmund
808 Forest Blvd., N. Dr. (40)
Storms, Mrs. Roy B.....5041 Central Ave. (5)
Strang, Mrs. Wm. C.....7760 Cree Trail (50)
Strickland, Mrs. Neil R..7510 Allisonville Rd. (50)
Stucky, Mrs. Elsworth K.
4528 N. Meridian St. (8)
Stump, Mrs. Loyd K.....6375 Brixton Lane (20)
Suelzer, Mrs. John.....4538 Sylvan Rd. (8)
Suess, Mrs. Robert E.....6926 Johnson Rd. (20)
Sutton, Mrs. William E.....5807 Brockton Dr. (20)
Swan, Mrs. John R.....320 Arden Dr. (20)

T

Talbott, Mrs. Dan E..6470 N. Michigan Rd. (68)
Tanner, Mrs. Henry S.
4461 N. Pennsylvania St. (5)
Taube, Mrs. Jack I...4353 N. Pennsylvania St. (5)
Taylor, Mrs. Clifford C.
3720 Briarwood Dr., E. (40)
Taylor, Mrs. Frederic W.....40 E. 43rd St. (5)
Teague, Mrs. Frank W.....555 W. Pine Dr. (60)
Tether, Mrs. J. Edward.....4839 E. 56th St. (20)
Tharpe, Mrs. Ray G.....6161 Sunset Lane (8)
Thatcher, Mrs. Hugh K., Jr...408 E. 45th St. (5)
Thoman, Mrs. Rex L...4422 E. Washington St. (1)
Thomas, Mrs. Charles R.
7029 Wayland Dr., R. R. 5, Box 456A (39)
Thomas, Mrs. Fred A.....5827 Broadway (20)
Thomas, Mrs. Lowell I.....28 W. Hampton Dr. (8)
Thomas, Mrs. Morris E.
6215 Spring Mill Rd. (60)
Thompson, Mrs. John V.....7899 Ridge Rd. (40)
Thompson, Mrs. Paul D.
6605 Eden Roc Crest (20)
Thompson, Mrs. Wayne.6519 Creekside Lane (20)
Throop, Mrs. Frank B..4134 Sunmeadow Lane (8)
Thurston, Mrs. A. L.....4078 Central Ave. (5)
Tinsley, Mrs. Walter B., Sr. 5638 Broadway (20)
Tinsley, Mrs. Walter B., Jr.
4505 Melbourne Rd. (8)
Tischer, Mrs. E. Paul....5383 Channing Rd. (26)
Tondra, Mrs. John M.....4511 Broadway (5)
Torrella, Mrs. Jose A.....5721 W. 18th St. (24)
Trudgen, Mrs. Spencer F...6031 Wexford Rd. (50)
Trusler, Mrs. Harold M.
6150 N. Meridian St. (8)
Trusler, Mrs. H. Marshall...4360 Swanson Dr. (8)
Tuchman, Mrs. Joseph H.
8515 Springview Dr. (60)
Tucker, Mrs. Warren S.
5338 N. Pennsylvania St. (20)
Tyner, Mrs. Harlan H.....3663 N. Delaware (5)

U-V

Ullom, Mrs. Ralph.....520 Wayside Dr. (60)
Van Meter, Mrs. C. Powell
4102 Marrison Place (26)
Van Tassel, Mrs Charles J., Jr.
5832 Washington Blvd., (20)

Vollrath, Mrs. Victor J.
7980 N. Pennsylvania St. (40)
Von Der Haar, Mrs. Gerard
1109 N. Mitchner St. (19)
Vore, Mrs. Robert E.....3710 Cheviot Place (5)

W

Wainscott, Mrs. Clinton S.
5332 Channing Road (26)
Waldo, Mrs. J. Thayer....420 W. 64th St. (60)
Walther, Mrs. Joseph E.
4266 N. Pennsylvania St. (5)
Walton, Mrs. William M.
8007 N. Illinois St. (60)
Warneke, Mrs. Charles.....2533 Ryan Dr. (20)
Warriner, Mrs. James B...990 N. Bolton Ave. (19)
Warvel, Mrs. John H.
4360 Kessler Blvd., N. Dr. (8)
West, Mrs. Joseph L.....2110 W. 38th St. (8)
Westfall, Mrs. B. Kemper, Jr.
4001 N. Meridian St. (8)
Wheeler, Mrs. David E.
6100 Old Shelbyville Rd. (27)
Wheeler, Mrs. Edward C...612 Holliday Lane (60)
White, Mrs. Donald J..7218 Sylvan Ridge Rd. (40)
White, Mrs. Douglas H., Jr.
7405 Frederick Dr. East (60)
White, Mrs. Gene A.....5725 Roxbury Ct. (26)
White, Mrs. John B.....5850 High Fall Rd. (26)
Wilkens, Mrs. Irvin W.
4820 E. Pleasant Run Pkwy., N. Dr. (1)
Williams, Mrs. Charles D...160 E. 71st St. (20)
Williams, Mrs. Harold.5536 Overbrook Circle (26)
Williams, Mrs. Howard S., Jr.
3824 N. Delaware St. (05)
Williams, Mrs. Hugh L...6231 Knyghton Rd. (20)
Wirey, Mrs. Harold R...2949 E. Hanna Ave. (27)
Wise, Mrs. William R.....1908 Orlando (8)
Wishard, Mrs. William N., Jr.
5720 N. Pennsylvania St. (20)
Wolfram, Mrs. Don J.
5716 N. Pennsylvania St. (20)
Wood, Mrs. Donald E...6467 W. Holliday Dr. (20)
Woolling, Mrs. Kenneth R..5751 Central Ave. (20)
Wray, Mrs. James B.
4707 Briar Patch Court (50)
Wrege, Mrs. Malcolm..5411 Shorewood Dr. (20)
Wright, Mrs. J. Wm., Jr.
4220 Knollton Rd. (8)
Wunsch, Mrs. Charles M.
6941 Washington Blvd. (20)
Wyttenbach, Mrs. John E..5808 Eastview Ct. (50)

Y-Z

Yacko, Mrs. Michael L.
5341 N. Channing Rd. (26)
Yingling, Mrs. Robert J..5322 Hedgerow Dr. (26)
Young, Mrs. James W.....440 E. 71st St. (20)
Young, Mrs. John M.
4535 Marcy Lane, No. 261 (5)
Young, Mrs. John T.....3030 Rex Dr. (22)
Zell, Mrs. Evertson H...4747 Millersville Rd. (26)

Zerfas, Mrs. Charles P. A.
R. R. 15, Box-233 Z, Acton (46259)
Bechtol, Mrs. L. D.
6330 E. 116th St. Noblesville (46060)
Dyken, Mrs. Paul
R. R. 2, Box 169A, Zionsville (46077)
Dyken, Mrs. Mark L.
R. R. 2, Box 169A, Zionsville (46077)
Gillim, Mrs. Parvin D.
Bloor Lane, R. R. 2, Zionsville (46077)
Harvey, Mrs. Verne K..R. R. 2, Box 354, Zionsville (46077)
Kalsbeck, Mrs. John E...R. R. 2, Box 168, Zionsville (46077)
Pennington, Mrs. Walter E.
Indiana Baptist Home, R. R. 1, Zionsville (46077)
Myers, Mrs. Roy V.....7710 Beta Circle, West Palm Beach, Fla. (33406)
Strickland, Mrs. James W.....9318A. Collidge, Ellsworth A.F.B., South Dakota (57706)

MARSHALL COUNTY

Graham, Mrs. C. R.....Bourbon (46504)
Hampton, Mrs. James N...R. R. 2, Argos (46501)
Kemp, Mrs. William....1006 N. Main St., Bourbon (46504)
Bowen, Mrs. Otis R...304 N. Center St., Bremen (46506)
Burket, Mrs. Cecil R.....121 E. Grant St., Bremen (46506)
Stine, Mrs. Marshall.420 Shumaker Dr., Bremen (46506)
Faulkner, Mrs. D. J.
W. Terrace Pky., Culver (46511)
Hippensteel, Mrs. Russell R.
936 South Shore Rd., Culver (46511)
Rosero, Mrs. Geo.
921 Lakeshore Dr., Culver (46511)

Plymouth

(*Zip Code* 46563)

Coursey, Mrs. James.....R. R. 2, Box 282A
France, Mrs. Lloyd C.....R. R. 2
Guild, Mrs. Kent.....R. R. 5
Reed, Mrs. Robert G.....235 Hogarth
Reno, Mrs. Edward.....700 Ferndale
Rimel, Mrs. James F.....909 Bayless
Robertson, Mrs. James S.....1081 Highland Ct.

MIAMI COUNTY

Shrock, Mrs. E. E.....Amboy (46911)
Crates, Mrs. Gordon.....Chili (46926)
Line, Mrs. Homer.....Chili (46926)
Sixbey, Mrs. Maurice.....Box 68, Chili (46926)
Rendel, Mrs. H. E.....Mexico (46958)

Peru

(*Zip Code* 46970)

Guthrie, Mrs. James U.....331 W. Third St.
Herd, Mrs. Cloyn R.....16 Farview
Hill, Mrs. Lloyd L.....520 Oak St.
Snyder, Mrs. Parker W.....159 W. Sixth St.
Yarling, Mrs. Francis.....117 E. Fifth St.

MONTGOMERY COUNTY

Crawfordsville

(*Zip Code* 47933)

Cooksey, Mrs. Thomas L.....205 Marshall
Daugherty, Mrs. Fred N.....415 W. Main St.
Eggers, Mrs. Richard R.....203 S. West St.
Haller, Mrs. Thomas C.....38 Delmar Dr.
Humphreys, Mrs. John W.....1309 Durham Dr.
Kinnaman, Mrs. Howard.....111 Wilhoit
Kirtley, Mrs. James M.....615 Thornwood Rd.
Lingeman, Mrs. Byron N.....203 Wallace Ave.
Millis, Mrs. Samuel C.....201 Wallace Ave.
Peacock, Mrs. Norman F.....111 Wallace Ave.
Pierson, Mrs. Robert H.....305 E. Main St.
Richards, Mrs. Edgar E.....Danville Rd., R. R.
Shannon, Mrs. Wesley E.....6 Locust Hill Dr.
Sharp, Mrs. John L.....1113 Durham Dr.
Viray, Mrs. V. G.....809 North Dr.

Smith, Mrs. Byron J.....Kingman (47952)
Blix, Mrs. Fred.....Ladoga (47954)
Priebe, Mrs. Fred H.....New Market (47965)
Kindell, Mrs. Hurschell D..New Richmond (47967)
Rusk, Mrs. Hubert M.....Box 36, Wallace (47988)
Johnson, Mrs. Dale.....Waynetown (47990)
Thompson, Mrs. Claude N...Waynetown (47990)
Parker, Mrs. Carl B.....Wingate (47994)

MORGAN COUNTY

Martinsville

(*Zip Code* 46151)

Brubeck, Mrs. Robert.....R. R. 6, Box 419C
Drake, Mrs. Ellery T.....Box 110
Eisenberg, Mrs. David....Box 310, Sunnyside Dr.
Gray, Mrs. Leon.....589 Valley Drive N.
Miller, Mrs. Robert J.....R. R. 3, Box 214A
Ostheimer, Mrs. George.....700 Valley Dr.
Pitkin, Mrs. McKendree C...440 E. Washington St.
Reese, Mrs. Jay S.....R. R. 4, Box 21A
Turner, Mrs. Maurice A.....490 East Pike St.
Van Wienen, Mrs. John.....439 N. Jefferson
Willan, Mrs. Horace R.....109 S. Jefferson
Winter, Mrs. William.....415 N. Jefferson

Mooresville

(*Zip Code* 46158)

Bivin, Mrs. James H.....N. Indiana Rd.
Comer, Mrs. Charles W.....R. R. 2
Comer, Mrs. Kenneth E.....R. R. 2
Kourany, Mrs. Oscar.....220 Saint Clair, No. 3

Murphy, Mrs. M. G.....Box 167, Morgantown (46160)
Wilson, Mrs. Oliver R.
Box 65, R. R. 3, Morgantown (46160)

NEWTON COUNTY

Schoonveld, Mrs. Arthur.....Brook (47922)
Parker, Mrs. John.....Goodland (47948)
Kresler, Mrs. L. E.....301 N. Sixth St., Kentland (47951)
Guzman, Mrs. Marc.....Morocco (47963)

NOBLE-LaGRANGE COUNTIES

Mattox, Mrs. Dean L.
R. R. 1, Box 116, Howe (46746)
Taylor, Mrs. Millard R.....Howe (46746)
Yunker, Mrs. Philip....Box 188, Howe (46746)
Greenlee, Mrs. Joseph A., Jr.
439 Water St., Kendallville (46755)
Gutstein, Mrs. Richard R.
120 Diamond, Kendallville (46755)
Messer, Mrs. Frank W.
328 S. Oak St., Kendallville (46755)
Williams, Mrs. H. O.
735 Mitchell St., Kendallville (46755)
Benedict, Mrs. Charles D.
R. R. 1, Box 14, LaGrange (46761)
Mellinger, Mrs. Michael O.
211 Poplar St., LaGrange (46761)
Studebaker, Mrs. Lloyd R.
325 W. Spring, LaGrange (46761)
Hooker, Mrs. Donald J...406 S. Main St., Ligonier (46767)
Stone, Mrs. Robert C.....501 S. Main St., Ligonier (46767)
Stultz, Mrs. Quentin F...3 Hawthorn Dr., Ligonier (46767)

OWEN-MONROE COUNTIES

Bloomington

(*Zip Code* 47401 *unless otherwise indicated*)

Austin, Mrs. Rayburn C.....114 S. Grant (03)
Bomba, Mrs. Brad.....1333 Sare Rd.
Borland, Mrs. Raymond M...R. R. 3, Box 51 (03)
Buck, Mrs. Roger L..R. R. 10, MelCurry Pike (03)
Buckingham, Mrs. Richard.....705 S. Fess
Byrne, Mrs. Louis.....Cameron Ave., R. R. 3
Campbell, Mrs. W. T.....Meadow Brook Dr.
Cochran, Mrs. John F.....113 N. Concord
Coons, Mrs. Frederick.....509 Hamilton Ct.
Creek, Mrs. J. A.....Sare Road
Demotte, Mrs. Laverne.....904 S. Rose
Emery, Mrs. Charles B., Jr.....1100 S. High St.
Estes, Mrs. Ambrose.....701 Highland Ave.
Farr, Mrs. James.....1310 Pickwick
Fowler, Mrs. R. Ross....R. 3, Pleasant Ridge Rd.
Geiger, Mrs. Dillon.....1704 N. Fee Lane
Hammer, Mrs. J. William.....701 S. Jordan
Hardtke, Mrs. Eldred F.....1400 Pickwick Place
Hepner, Mrs. H. S.....302 E. 7th St.
Hibner, Mrs. Kermit Q.....1306 Pickwick Pl.
Holland, Mrs. D. J.....1100 Atwater
Holland, Mrs. Philip T.....1001 S. Jordan
Hrisomalos, Mrs. Frank.....228 S. Hillsdale
Karsell, Mrs. Philip.....700. S. Highland
Kelly, Mrs. William.....1315 S. High St.
Lundblad, Mrs. Wilfred.....1880 Covenanter Dr.
Lyons, Mrs. Robert.....Walnut St. Rd.
McClary, Mrs. Charles.....1920 E. Third
McIntire, Mrs. C. R.....2424 Dunn
Manifold, Mrs. Harold.....1310 Nancy
Marchant, Mrs. Clarence.....350 S. College
Mather, Mrs. Glenn.....1215 S. Brooks Dr.
Middleton, Mrs. Thomas.....210 Gilbert
Miller, Mrs. John M.....1402 Winfield Rd.
Morford, Mrs. Guy....Knightridge Manor, Apt. 36
Owens, Mrs. Walter.....4531 Sheffield Ct.
Poolitsan, Mrs. George.....1217 E. First St.
Ramsey, Mrs. Hugh.....619 E. First
Ratts, Mrs. Larry.....1909 Viva Drive
Reed, Mrs. William.....1215 Atwater
Rieger, Mrs. I. Taylor.....654 Woodcrest Dr.
Robinson, Mrs. Robert.....2708 Browncliff
Rogers, Mrs. Otto F.....804 E. 8th
Rollins, Mrs. Thomas.....815 S. Rose (03)
Ross, Mrs. James.....R. R. 1, Box 55A
Ruff, Mrs. Jerard.....2303 Fritz Dr.
Schell, Mrs. H. Richard.....1401 Maxwell Lane
Schilling, Mrs. Richard.....1708 S. High
Schoffer, Mrs. James J.....4227 Penn Ct.
Schultheis, Mrs. Richard.....Maple Grove Rd.
Seagle, Mrs. W. Courtney.....4236 Cambridge
Sibbitt, Mrs. Joseph W.....818 Sheridan
Smalley, Mrs. R. E.....4315 Saratoga Dr.
Smith, Mrs. Herschel S.....200 Glendora Dr.
Spencer, Mrs. B. L.....R. R. 2, Mt. Gilead Rd.
Stangle, Mrs. Wm. J.....2305 E. Second
Steele, Mrs. Lowell.....4417 Blackstone Ct.
Stoner, Mrs. Harold.....R. R. 2, Box 314
Taraba, Mrs. Ralph.....211 E. Martha St.
Topolgus, Mrs. James N.....1015 Atwater Ave.
Wass, Mrs. Robert.....313 Reisner
Way, Mrs. James A.....1037 Maxwell
White, Mrs. J. Phillip....814 Meadowbrook Ave.

PARKE-VERMILLION COUNTIES

Clinton

(*Zip Code* 47842)

Evans, Mrs. F. J.....1315 S. Main St.
Herzberg, Mrs. Milton.....545 S. Fourth St.
Kercheval, Mrs. J. M.....452 S. 5th
Somerville, Mrs. John W...P. O. Box 264, R. R. 2

Webb, Mrs. L. C.....Dana (47847)
Gailey, Mrs. I. L....1332 N. Routiers, Indianapolis (46219)

Rockville

(*Zip Code* 47872)

Beebe, Mrs. Milton O., Jr.....9 Valley Dr.
Bloomer, Mrs. Richard S.....502 W. York St.
Kempf, Mrs. Gerald F.....Indiana State Hospital for Chest Diseases
Minich, Mrs. William G.....617 Woodland Dr.

PERRY-SPENCER COUNTIES

Bush, Mrs. Hargis R.....Sixth St., Cannelton (47520)
Gilbert, Mrs. Robert G.
411 E. Seventh St., Cannelton (47520)
Glackman, Mrs. John C. 207 Center St., Rockport (47635)
Snyder, Mrs. Earl.....Troy (47588)

Tell City
(*Zip Code* 47586)

Herr, Mrs. William J.....Boyd Road
James, Mrs. Nicholas A.....740 Ninth St.
Lally, Mrs. Bernard.....918 Main St.
Lohoff, Mrs. Lewis C.....425 10th St.
Neifert, Mrs. Noel L.....1118 Blum St.
Ress, Mrs. Gene E.....1530 13th St.
Smith, Mrs. Fred, Jr.....1407 12th Street
Ward, Mrs. Robert A.....1108 Herman St.

PORTER COUNTY

Hoham, Mrs. Frederick D...Box 128, Ogden Dunes, Portage (46368)
Lands, Mrs. Robert M.
Saturn Lane, Portage (46368)

Chesterton
(*Zip Code* 46304)

Forchetti, Mrs. John A.....106 Wilson Ave.
Hall, Mrs. Thomas.....16 Ridge Dr., Dune Acres
Harless, Mrs. C. M.....123 W. Indiana Ave.
Robertson, Mrs. W. C.....600 E. Morgan

Valparaiso
(*Zip Code* 46383)

Brown, Mrs. J. C.....1808 Napoleon
Carlson, Mrs. M. R.....2206 Vine St.
Davis, Mrs. Carl M.....R. R.6
DeGrazia, Mrs. E. J.....410 Washington St.
Evans, Mrs. Daniel R. ....1306 Forest Park Ave.
Frank, Mrs. John R.....303 Indiana Ave.
Gold, Mrs. Marvin E.....1407 Washington St.
Keller, Mrs. Theodore.....1309 Monticello Pk. Dr.
Kilmer, Mrs. Warren.....305 Spectacle Dr.
Makovsky, Mrs. Theodore..1807 Beulah Vista Dr.
O'Neill, Mrs. Martin J.....301 Washington St.
Sacks, Mrs. Leonard Z.....563 Ravine Dr.
Sturdevant, Mrs. Frank M.....1302 Wood St.
Vietzke, Mrs. Paul C. F.....1302 Summit Pl.
Wu, Mrs. Stewart.....102 Mayfield Ave.

PUTNAM COUNTY

Veach, Mrs. Richard L.....Bainbridge (46105)
Ellett, Mrs. John, Jr...Box 126, Coatsville (46121)

Greencastle
(*Zip Code* 46135)

Dettloff, Mrs. Frederick R.....300 Highfall Ave.
Haggerty, Mrs. Fred.....406 Melrose Ave.
Johnson, Mrs. James B.....314 Highfall Ave.
Lett, Mrs. James.....335 Greenwood
Roof, Mrs. Roger.....713 Highridge
Schauwecker, Mrs. Cleon M.....613 Ridge Ave.
Smith, Mrs. A. Wilson.....R. F. D. 2
Steele, Mrs. Dick J.....207 Northwood Blvd.
Tipton, Mrs. William R.....103 Northwood Blvd.
Wiseman, Mrs. V. Earle.....6 Durham Ave.

RANDOLPH COUNTY

Farmland
(*Zip Code* 47340)

Nixon, Mrs. Byron.....312 N. Main
White, Mrs. Harvey E.....200 S. Main

Shallenberger, Mrs. H. R.....Modoc (47358)
Potter, Mrs. Richard M.
120 N. Walnut, Ridgeville (47380)

Union City
(*Zip Code* 47390)

Chambers, Mrs. Carol R.....1000 N. Columbia St.
Chambers, Mrs. Leroy B.....200 Carter St.
Landon, Mrs. David J.....R. R. 2, Hwy. 28
Phipps, Mrs. Leland K.....R. R. 1, Box 63A
Reid, Mrs. Robert W.....706 W. Division
Wagoner, Mrs. B. D.....409 N. Columbia St.

Winchester
(*Zip Code* 47394)

Dininger, Mrs. William S.....303 S. Main St.
Engle, Mrs. Russell B.....R. R. 2
Painter, Mrs. Lowell W.....507 S. Main St.
Slick, Mrs. C. R.....512 S. Oak St.

RUSH COUNTY

McNabb, Mrs. George B.....Carthage (46115)
Smith, Mrs. Stephen D.
308 N. Washington, Knightstown (46148)
Worth, Mrs. C. Willard.....Milroy (46156)

Rushville
(*Zip Code* 46173)

Atkins, Mrs. C. C.....510 N. Perkins
Corpe, Mrs. Kenneth F.....R. R. 4
Ellis, Mrs. Davis W.....1102 Sugar Hill Dr.
Green, Mrs. Frank H.....516 N. Morgan
McKee, Mrs. Harry G.....1109 N. Arthur St.
McKee, Mrs. Harry.....R. R. 6
Norris, Mrs. Marvin.....1107 N. Main St.
Schneider, Mrs. Marvin.....431 N. Perkins St.
Shanks, Mrs. Roy E.....1110 N. Morgan

ST. JOSEPH COUNTY

Houser, Mrs. D. S.
24751 N. Riley Rd., North Liberty (46554)

Mishawaka
(*Zip Code* 46544)

Barone, Mrs. C. V.....59053 Bremen Highway
Ganser, Mrs. Richard A.....1020 Wilson Blvd.
Gerig, Mrs. E. Lavern.....713 W. 11th St.
Orr, Mrs. W. Robert.....1335 Prospect Dr.
Pairitz, Mrs. Frank D.....59315 Clover Rd.
Reed, Mrs. Robert.....903 Homewood
Roberts, Mrs. Billy J.....15605 Hearthstone Dr.
Rosenwasser, Mrs. Jacob.....834 Lincoln Way E.
Spalding, Mrs. Wendell L.....60100 S. Fir Road
Stringer, Mrs. D. D.....1035 Lincoln Way E.
Templeton, Mrs. Ames R.....522 Calhoun St.
Walters, Mrs. Charles E.....16166 Ireland Rd.
Whitlock, Mrs. Merle E.....304 Lincoln Way, E.
Wurster, Mrs. H. C.....221 E. Third St.
Zimmer, Mrs. Henry J.....333 Edgewater Dr.

Spenner, Mrs. Raymond W.
R. R. 3, Diamond Lake, Cassopolis, Mich. (49031)

South Bend
(*Zip Code* 466 *plus zone number*)

A

Acker, Mrs. Robert B...103 S. Ironwood Dr. (15)
Arisman, Mrs. R. K.....125 W. Marion St. (01)

B

Bartsch, Mrs. Harvey L..61397 S. Miami Rd. (14)
Beach, Mrs. Norman.....1903 Trent Way (14)
Bechtold, Mrs. Samuel E.....313 Pendle St. (37)
Bell, Mrs. H. D.....1357 E. Champeau St. (17)
Bennett, Mrs. Jene R..1826 E. Jefferson Blvd. (17)
Berke, Mrs. Robert D..1420 E. Jefferson Blvd. (17)
Biasini, Mrs. Ben A.....19585 Glendale Rd. (37)
Bickel, Mrs. David A...1335 E. Wayne St. N. (15)

Birmingham, Mrs. P. J... 61490 Meadowlark Lane (14)
Bixler, Mrs. Louis C.....1817 Portage Ave. (16)
Bodnar, Mrs. Leslie M.....1843 Portage Ave. (16)
Bogan, Mrs. Wm. C.....1512 Hass Dr. (35)
Borough, Mrs. Lester D.....816 E. Woodside (14)
Brechtl, Mrs. H. J.....2305 E. Washington (15)
Buchanan, Mrs. Wallace D. 1326 E. Wayne St., N. (15)
Buechner, Mrs. Fred W..603 W. Marion St. (01)
Buslee, Mrs. Roger M...524 S. Twyckenham (15)
Butts, Mrs. Milton A.....744 N. Jacobs St. (17)

C

Cassady, Mrs. John R....2225 Riverside Dr. (16)
Cassady, Mrs. J. Vernal....2216 E. Madison (15)
Chamblee, Mrs. Roland W.....53287 Ironwood Rd. (35)
Clark, Mrs. William H.....1227 Garland Rd. (14)
Colip, Mrs. George D.....260 David St. (37)
Cook, Mrs. Gordon C...1620 Southwood Ave. (15)
Cox, Mrs. A. Charles....17430 Darden Rd. (37)
Custer, Mrs. Edward W..52383 N. Laurel Rd. (37)

D

Davis, Mrs. Edward A.....52820 Kenilworth Rd. (37)
Denham, Mrs. Robert H., Jr..1515 E. Colfax (17)
Devetski, Mrs. Robert L...52955 Swanson Dr. (35)
DeVoe, Mrs. K. R.....52978 Highland Dr. (35)
Dingley, Mrs. Albert, Jr.....1309 E. Wayne St. S. (15)
Dodd, Mrs. Robert D.....1510 Tudor Lane (14)
Dolezal, Mrs. Bernard J....425 W. North Shore Dr. (16)
Donnelly, Mrs. Everett F. 1246 E. Jefferson Blvd. (17)
Dunlap, Mrs. D. Logan....123 W. North Shore Dr. (17)

E

Eades, Mrs. R. Charles..232 Marquette Ave. (17)
Edwards, Mrs. Bernard
2516 S. Twyckenham Dr. (14)
Egan, Mrs. Sherman L.....944 Riverside Dr. (16)
Engel, Mrs. Howard R..1845 Ridgewood Circle (17)
English, Mrs. J. Paul.3116 Robinhood Lane (14)
Erickson, Mrs. G. Walter....3012 Robinhood Lane (14)
Erickson, Mrs. Lester G....1212 E. Woodside (14)

F

Feferman, Mrs. Martin E..125 S. Esther St. (17)
Feldman, Mrs. Max.....1310 E. Fairview (14)
Filipek, Mrs. Walter J..2513 Lincoln Way W. (28)
Firestein, Mrs. Ben Z...125 W. Marion St. (01)
Firestein, Mrs. Ray....502 N. Ironwood Dr. (15)
Fish, Mrs. Edson C.....19054 Summers Dr. (37)
Foley, Mrs. Hansel.....1314 Leeper (17)
Forrest, Mrs. O. Norman..1138 E. Wayne St. (17)
Frank, Mrs. Herbert....2616 S. Twyckenham Dr. (14)
Frank, Mrs. L. L., Jr.....1750 N. Wilbur (28)
Frey, Mrs. William B.....1714 E. Bader (17)
Friedman, Mrs. Morris S...1617 E. Jefferson Blvd. (17)

G

Gaffney, Mrs. Raymond A...3215 York Road (14)
Ganser, Mrs. Ralph.....101 N. Conestoga (15)
Gates, Mrs. George E...411 W. North Shore Dr. (17)
Gilman, Mrs. Marcus M...1925 E. Jefferson Blvd. (17)
Graf, Mrs. John P.....53260 Placid Dr. (37)
Green, Mrs. G. Richard..1515 E. Wayne St. (15)
Green, Mrs. George F.....754 Country Club Lane (15)
Green, Mrs. Norval E..1726 E. LaSalle Ave. (17)

H

Haley, Mrs. George M.
1131 E. Jefferson Blvd. (17)
Hall, Mrs. James.....1718 E. Jefferson Blvd. (17)
Hamilton, Mrs. Charles O.
1418 E. Washington Ave. (17)
Haugseth, Mrs. Ellsworth K...820 N. Ironwood Dr. (15)
Hawkins, Mrs. Glen E.....17280 Parker Ave. (35)
Helmer, Mrs. John..315 W. North Shore Dr. (17)
Hildebrand, Mrs. J. O...1637 Southbrook Dr. (14)
Hill, Mrs. Theodore.....107 N. Eddy St. (17)
Hill, Mrs. Wallace C.....248 S. Hawthorne (17)
Hyde, Mrs. Carroll C.....1521 E. Colfax Ave. (17)

J-K

Jankowski, Mrs. Ernest B...2230 Ribourde (28)
Johns, Mrs. N. C.....52605 Brooktrail Dr. (37)
Kamm, Mrs. Bernard A..125 W. Marion St. (01)
Karn, Mrs. John W.....1535 Wall St. (15)
Kieffer, Mrs. William J...1113 E. Wayne St. (17)
Krueger, Mrs. John E.....620 E. Peashway (17)
Kuhn, Mrs. Frederick L.....1725 Inwood Dr. (18)

L

Lamb, Mrs. Leonard...1321 E. Wayne St. S. (15)
Lane, Mrs. William....1301 N. Michigan St. (17)
Lester, Mrs. Vern L...3536 Springboard Dr. (14)
Levatin, Mrs. Bernard I..1814 Churchill Dr. (17)
Levkoff, Mrs. Abner H...1815 E. Jefferson Blvd. (17)
Lionberger, Mrs. John R. 1419 E. Jefferson Blvd. (17)
Liss, Mrs. Emanuel C.....1683 N. Riverside Dr., Apt. B (16)
Lockhart, Mrs. Philip B...1611 Wayne St. E. (15)

M

Macri, Mrs. Paul A.....1601 E. Cedar (17)
Mahank, Mrs. Camiel C...1804 E. Jefferson Blvd. (17)
Martin, Mrs. Charles...2007 Northside Blvd. (15)
Marquis, Mrs. Gordon.....329 Wakewa (17)
Martinov, Mrs. William E.....1421 Wall St. (15)
Mason, Mrs. Bernard A.....2719 Marine St. (14)
Mauzy, Mrs. Merritt C.....1740 Hass Dr. (35)
MacLeod, Mrs. John K.....930 Simon Court (15)
McCraley, Mrs. William J.....1737 Belmont Ave. (15)
McMeel, Mrs. James.....1138 Whitehall Dr. (15)
McQuade, Mrs. John....52361 Portage Hwy. (28)
Metcalfe, Mrs. Grant E.
101 S. Conestoga Lane (17)
Mott, Mrs. C. A.....2733 Lincoln Way West (28)
Mueller, Mrs. Hilbert M...3525 Windingwood Dr. (15)
Murphy, Mrs. Eugene C.....1411 Sunnymede Ave. (15)

N-O

Neher, Mrs. John L.....17371 Cleveland Rd. (35)
Nelson, Mrs. Raymond E.....1909 E. Madison St. (17)
Nelson, Mrs. Robert.....104 S. Hawthorne (17)
Olson, Mrs. Donald T.....1806 Cedar St. (17)
Olson, Mrs. Kenneth L.....1228 E. Woodside Ave. (14)
Oren, Mrs. William.....1149 E. Belmont (15)

P

Parsons, Mrs. Robert....1464 Ridgedale Rd. (14)
Pascuzzi, Mrs. Chris A...1930 Dorwood Dr. (17)
Pauszek, Mrs. Thomas B...916 Riverside Dr. (16)
Petrass, Mrs. Andrew....22027 Liberty Highway (19)
Phelps, Mrs. Stephen R.....1331 Sunnymede Ave. (15)
Plain, Mrs. George.....17836 Ponader Dr. (35)
Plain, Mrs. George L.....1857 N. College St. (28)
Pyle, Mrs. H. Dale....115 N. Sunnyside Ave. (17)

R

Rigaux, Mrs. Armand.....1622 E. Madison (17)
Rigley, Mrs. Edward L.
1607 N. Riverside Dr. (16)
Rosenheimer, Mrs. George M...1425 E. Woodside (14)
Rubens, Mrs. Eli.....1240 E. Irvington (14)

S

Sanderson, Mrs. Robert B...238 S. Hawthorne Dr. (17)
Sandock, Mrs. Louis F.....235 S. Esther St. (17)
Sandoz, Mrs. Harry H..239 S. Hawthorne Dr. (17)
Schaphorst, Mrs. Richard A...514 Lincoln Way E. (14)
Schiller, Mrs. Herbert A...1813 E. Cedar St. (17)
Schlossberg, Mrs. V. E.....2719 Corby Blvd. (17)
Scott, Mrs. Frank M.....1220 E. Woodside (14)
Sellers, Mrs. Francis....814 Oakridge Dr. (17)
Sharp, Mrs. Merle C...17780 Waxwing Lane (35)
Shriber, Mrs. Wm. H.....1512 E. Madison (17)
Shriner, Mrs. Richard....53362 Juniper Rd. (37)
Sisson, Mrs. Norvel D...1614 Oak Park Dr. (17)
Skillern, Mrs. Scott....1553 Southbrook Dr. (14)
Slominski, Mrs. Harry H...1862 College St. (28)
Sobol, Mrs. Zbigniew.....19072 Summers Dr. (37)
Staunton, Mrs. H. A.....124 S. 34th St. (15)
Stiver, Mrs. Dan D.....1127 E. Wayne St. N. (15)
Stogdill, Mrs. William J.....520 N. Coquillard Dr. (17)
Stratigos, Mrs. Joseph S...527 N. Lafayette (01)
Sweeney, Mrs. Robert.....1203 Sunnymede (15)

T

Thompson, Mrs. John M..1618 E. Cedar St. (17)
Thornton, Mrs. M. J.....125 W. Marion St. (01)
Tirman, Mrs. Wallace S.....1224 E. Wayne St., N. (15)
Troyer, Mrs. Marlin.....17700 Ireland Rd. (14)

V-W-Z

Van Fleit, Mrs. W. E.....1617 E. Cedar St. (17)
Weiss, Mrs. Eugene
1605 E. Washington Ave. (17)
White, Mrs. Donald G.....1721 E. Altgeld (14)
Wilson, Mrs. James M.....1507 E. Wayne (15)
Wind, Mrs. Joseph.....1629 Hass Dr. (35)
Zeiger, Mrs. Irvin L.....1205 E. Irvington (14)

SHELBY COUNTY

Davis, Mrs. John A.....Flat Rock (47234)
Nigh, Mrs. R. M.....Fairland (46126)

Shelbyville

(*Zip Code* 46176)

Arata, Mrs. Lucian A.....327 W. Broadway
Dalton, Mrs. Wilson L.....1712 Culbertson
Deupree, Mrs. William D.....50 W. Mechanic St.
Gehres, Mrs. Robert W.....610 Shelby St.
Green, Mrs. William L.....Country Club Heights
Inlow, Mrs. Paul M.....53 W. Washington St.
Inlow, Mrs. Robert.....424 Lockerbie
Inlow, Mrs. W. D.....Spring Hill Rd.
McFadden, Miss Marian.....28 W. Mechanic St.
Moheban, Mrs. Joseph.....Spring Hill Rd.
Paz, Mrs. Luis.....526 E. McKay Rd.
Phares, Miss Frances.....408 S. Harrison
Richard, Mrs. Norman F.....Country Club Heights
Scott, Mrs. V. Brown.....R. R. 2, N. Riley Hwy.
Silbert, Mrs. David B.....1100 Fairfield Dr.
Spindler, Mrs. Robert D.....165 W. Mechanic St.
Tindall, Mrs. William R.....616 S. Harrison
Tower, Mrs. James H., Jr...239 W. Washington St.
Whitcomb, Mrs. Roger F.....218 W. Broadway

STARKE COUNTY

Leinbach, Mrs. Earl R..206 Davis, Hamlet (46532)
Henry, Mrs. Howard J.....R. R. 1, Knox (46534)
Ingwell, Mrs. Guy B.....402 E. Lake St., Knox (46534)
McClure, Mrs. Clark.....R. R. 1, Knox (46534)
Palmer, Mrs. Alan.303 E. Lake St., Knox (46534)

TIPPECANOE COUNTY

Lafayette

(*Zip Code* 479 *plus zone number*).

Babb, Mrs. Forrest J.....2106 S. Ninth St. (05)
Bayley, Mrs. William E.....303 S. Ninth St. (01)
Bridge, Mrs. Barton C.....22 Thise Ct. (05)
Buhrmester, Mrs. Harry C...Freiberger Lane (05)
Carpenter, Mrs. James B.....R. R. 5 (01)
DuBois, Mrs. Ramon B...519 Calvert Lane (05)
Fields, Mrs. Don C.....R. R. 12, Box 232 (05)
Flack, Mrs. Russell A.....3600 Cypress Lane (05)
Frey, Mrs. Harley H., Jr...505 Calvert Lane (05)
Fritch, Mrs. John M.....1619 S. Fifth St. (05)
Harvey, Mrs. Bennett B...2908 Beverly Lane (04)
Horswell, Mrs. Richard R...2312 Dakota Dr. (05)
Johnson, Mrs. Herbert S.....712 Cherokee (05)
Karberg, Mrs. Richard J.....1212 El Prado (05)
Klepinger, Mrs. Harry E.....909 N. 21st St. (04)
Kohne, Mrs. Robert W.....1001 Pontiac (05)
Landis, Mrs. Charles B.....505 S. 17th St. (01)
McAdams, Mrs. Hugh B...2110 Birch Lane (05)
McKinley, Mrs. Joseph..610 Lingle Terrace (01)
McPherson, Mrs. Richard C.....30 Thise Court (05)
Neumann, Mrs. Kenneth O..1410 S. 18th St. (05)
Pickerill, Mrs. James M.....601 N. 28th St. (04)
Ralston, Mrs. Marc A.....1613 Dearborn St. (02)
Ratcliff, Mrs. Frank W.....1000 Wea Ave. (05)
Scheeres, Mrs. Jacob W.....714 Hitt St. (01)
Sholty, Mrs. William M..Shadeland Farm Rd. (04)
Smith, Mrs. Lowell C.....615 Lingle (01)
Stolz, Mrs. Thomas.....R. R. 1, (06)
Trout, Mrs. Carl J.....800 State St. (01)
Underwood, Mrs. George M.....2540 Lafayette Dr. (05)
Vermilya, Mrs. Robert W..R. R. 5, Cedar Bluff Rd. (01)
Washburn, Mrs. Mary.....918 Rochester St. (05)

West Lafayette

(*Zip Code* 47906)

Bahler, Mrs. Dean R.....104 Mohawk Dr.
Baker, Mrs. John R.....2321 Carmel Dr.
Beuerman, Mrs. Virgil A.....509 Emily St.
Bolin, Mrs. Robert C.....908 Windsor Dr.
Bush, Mrs. Jack A.....180 Creighton Rd.
Canganelli, Mrs. Vincent G.....108 Mohawk Lane
Carpenter, Mrs. Robert.....492 Littleton St.
Davis, Mrs. Howard B.....833 Hillcrest Rd.
Elliott, Mrs. Paul W.....348 W. Stadium Dr.
Gripe, Mrs. Richard P...2179 Tecumseh Park Lane
Hannemann, Mrs. Robert E.....812 Avondale
Heid, Mrs. George J.....515 Park Ridge Dr.
Hughes, Mrs. Anson.....1712 Sheridan
Hughes, Mrs. Richard R.....908 Carrollton Blvd.
Hunter, Mrs. Dean M.....1010 North Western
Keplinger, Mrs. James.....136 E. Navajo
Klatch, Mrs. Ben Z.....1415 Woodland Dr.
Kochell, Mrs. Richard L.....2313 Carnel Dr.
Knipers, Mrs. Fred M., Jr.....2225 Sacramento
Lempke, Mrs. Lloyd W.....134 Magnolia Ct.
Lind, Mrs. Jaap Jan.....750 Northridge
Loop, Mrs. Frederick A.....119 Leslie Dr.
McAdams, Mrs. Robert C. .....625 Ridgewood Dr.
McFadden, Mrs. James M.....1424 N. Salisbury
Marvel, Mrs. Howard R.....136 Arrowhead Dr.
Marsh, Mrs. Geo. W.....2121 Happy Hollow Dr.
Mather, Mrs. Charles R.....1815 Ravina Rd.
Mather, Mrs. Robert L.....321 Leslie Ave.
Peyton, Mrs. Frank W.....612 Ridgewood

Ramsey, Mrs. Geo. F.....202 Knox Dr.
Riggs, Mrs. W. A.....507 Sharon Rd.
Shively, Mrs. John L.....205 Lindberg Ave.
Spurlock, Mrs. F. H.....1625 Western Dr
Stahl, Mrs. Edward T.....324 Park Lane
Stuntz, Mrs. Edgar C.....148 Creighton Rd.
Van Den Bosch, Mrs. W. R.....715 Princess Dr.
Wagner, Mrs. A. R.....1834 Summit Dr.
Waits, Mrs. Chester L.....622 Rose St.
Weller, Mrs. Wendell A.....105 Pawnee Dr.

Weller, Mrs. Ralph.....Box 38, Rossville (46065)

VANDERBURGH COUNTY

Evansville

(*Zip Code* 477 *plus zone number*).

A

Acre, Mrs. Robert R.....2311 Lincoln Ave. (14)
Adler, Mrs. Ray N.....1660 Lincoln Ave. (14)
Adye, Mr. Wallace M.....320 Inwood Dr. (11)
Alexander, Mrs. John E.....1127 Lincoln Wedgewood Apartments No. 645 (14)
Allen, Mrs. William.....8203 Newburgh Rd. (15)
Antes, Mrs. Earl H...1201 Bonnie View Dr. (15)
Austin, Mrs. Eugene W.....721 Colony Rd. (15)

B

Baker, Mrs. Mason R.....4500 E. Cherry St. (15)
Barnhart, Mrs. Willard T...507 S. Boeke Rd. (14)
Beck, Mrs. Robert E.....6000 Newburgh Rd. (15)
Beisel, Mrs. Larry H.....1427 Lark (15)
Bender, Mrs. Martin J..2416 Bayard Park Dr. (14)
Bennett, Mrs. Abner P...961 Blue Ridge Rd. (15)
Bissonnette, Mrs. Roger P...911 Colony Rd. (15)
Bloss, Mrs. Bryant A.....8700 Whetstone (11)
Boone, Mrs. Robert D....417 S. Alvord Blvd. (14)
Brakel, Mrs. Frank, Jr.....1429 Oriole Dr. (15)
Britt, Mrs. Robert L...6317 Newburgh Rd. (15)
Brockmole, Mrs. Arnold W. 5901 New Harmony Rd. (12)
Brooks, Mrs. Edwin.....5620 Kratzville Rd. (10)
Bryan, Mrs. Stanton L..3211 E. Mulberry St. (15)
Buddrus, Mrs. David.....508 S. Boeke Rd. (14)
Buehner, Mrs. Donald F.....1200 Bonnie View Dr. (15)
Burger, Mrs. Thomas C.....3915 Washington Ave. (15)
Burnikel, Mrs. Ray H.....960 S. Rotherwood Ave. (14)
Burress, Mrs. Clyde.....10100 Old St. Rd. (11)

C

Cacia, Mrs. John J.....420 S. Boeke Rd. (14)
Carlson, Mrs. Ralph F..1250 Bayard Park Dr. (14)
Cates, Mrs. Jeryl.....647 Plaza Dr. (15)
Clark, Mrs. Thomas W...820 S. Meadow Rd. (15)
Clouse, Mrs. Paul A.....5801 Newburgh Rd. (15)
Coleman, Mrs. Joseph E...2831 Wayside Dr. (11)
Colvin, Mrs. Robert.....2048 Polaris (15)
Combs, Mrs. Herman....Middle Mt. Vernon Rd. R. R. 1, Box 245 (12)
Cooper, Mrs. Waller W.....4410 Oak St. (15)
Corcoran, Mrs. P. J. V.....2412 E. Chandler Ave. (14)
Crawford, Mrs. James 631 Blue Ridge Dr. W. (15)
Crevello, Mrs. Albert J.....807 S. Burkhardt Rd. (15)
Cullnane, Mrs. Chris W.....3020 Mt. Vernon Ave. (12)

D

Daves, Mrs. W. Lawrence...3911 Bellemeade Ave. (15)
Davidson, Mrs. Harold H..800 Blue Ridge Rd. (15)
Davis, Mrs. Kenneth.....7107 Monroe Ave. (15)
Davis, Mrs. Max D.....1426 Lark (15)
Deems, Mrs. Meyers 6830 Arcadian Highway (15)
Denzer, Mrs. Edward K.....540 Scenic Dr. (15)
Denzer, Mrs. William O.....923 Bellemeade (13)
Dieckman, Mrs. Herbert S. 10 Johnson Place (14)
Dimmett, Mrs. James.....524 Plaza Dr. (15)
Dodd, Mrs. R. K.....1705 S. New Green River Rd. (15)
Durkee, Mrs. Melvin S.....615 Trinity Dr. (15)
Dycus, Mrs. Walter A.....3400 Koring Rd. (12)
Dyer, Mrs. Wallace K...812 St. James Blvd. (14)

E

Ebin, Mrs. J. L.....8500 Whetstone (11)
Engel, Mrs. Edgar L.....1411 E. Park Dr. (14)
Ewer, Mrs. Robert W.....7226 E. Blackford (15)

F

Faith, Mrs. Ira L.....950 Blue Ridge Rd. (15)
Faul, Mrs. Henry J.....725 S. Willow Rd. (14)
Faw, Mrs. Melvin L.....2400 E. Chandler (14)
Fenneman, Mrs. Robert J. Box 145, R. R. 8, Old St. Rd. (11)
Fisher, Mrs. William C.....219 S. Alvord (14)
Fitzsimmons, Mrs. Elvin L..500 S. Boeke Rd. (14)

G

Garland, Mrs. Edgar A.....719 Plaza Dr. (15)
Garst, Mrs. Garland.....1928 Theatre Dr. (11)
Gaul, Mrs. L. Edward.....18 Johnson Pl. (14)
Geller, Mrs. Samuel.....R. R. 8, Box 143-A (11)
Getty, Mrs. William H..1810 Mt. Auburn Rd. (12)
Giorgio, Mrs. Douglas J.....916 S. Burkhardt Rd. (15)
Gourieux, Mrs. E. DeVerre 7500 Taylor Ave. (15)
Griep, Mrs. Arthur H...5414 Madison Ave. (15)
Grimm, Mrs. William C...513 S. Rotherwood Ave. (14)
Guckien, Mrs. Joseph.....2301 E. Powell (14)

H

Hammond, Mrs. R. Case 6820 Arcadian Hwy. (15)
Harlan, Mrs. William L...731 S. Frederick (14)
Harned, Mrs. Ben King, Jr.....6301 Lincoln Ave. (15)
Harris, Mrs. Robert L.....870 S. Boeke Rd. (14)
Hart, Mrs. L. Paul.....622 Trinity Dr. (15)
Hartley, Mrs. Clarence A., Jr.....300 Hesmer Rd. (11)
Hassel, Mrs. Walter.....3712 Herndon Dr. (11)
Healy, Mrs. William.....3911 Bellemeade (15)
Heinrich, Mrs. Weston A..1408 Lincoln Ave. (14)
Hendershot, Mrs. Eugene L...7006 Newburgh Rd. (15)
Hermayer, Mrs. Stephen....1316 Bonnie View Dr. (15)
Herrmann, Mrs. Gordon T..218 S. Spring St. (14)
Herzer, Mrs. Clarence C.....211 E. Mill Rd. (11)
Himebaugh, Mrs. Gilbert J.....408 S. Alvord Blvd. (14)
Hobgood, Mrs. James L...7527 Taylor Circle (15)
Hoover, Mrs. J. Guy.....864 Lodge Ave. (14)
Hovda, Mrs. Richard B...800 St. James Blvd. (14)
Huggins, Mrs. Victor S...520 S. Alvord Blvd. (14)
Hyatt, Mrs. Gilbert T.....1127 Lincoln Ave. (14)

J-K

Johnson, Mrs. Harold V..1303 Masker Pk. Dr. (12)
Johnson, Mrs. Stephen L. 2215 Lincoln Ave. (14)
Kelley, Mrs. John B.....1420 Lark Dr. (15)
Kessler, Mrs. Robert..1200 Harrelton Court (15)
Kiechle, Mrs. Fred L.....726 S. E. First St. (13)
Kimmel, Mrs. George.....429 S. St. James (14)
Kincaid, Mrs. Robert S...5417 Stringtown Rd. (11)

L

Langsam, Mrs. Charles L.
4511 Bellemeade Ave. (15)
Lashley, Mrs. Donald.....1406 Martin Lane (15)
Laubscher, Mrs. Clarence A.
1201 Laubscher Rd. (10)
Lawler, Mrs. John.....520 S. Roosevelt (14)
Lawrence, Mrs. Joseph C.
1362 E. Chandler Ave. (14)
Liebundguth, Mrs. Henry..5206 Lincoln Ave. (15)
Lessure, Mrs. Alfred P.....3105 E. Oak St. (14)
Logan, Mrs. Jesse R.....503 First Ave. (10)
Longstaff, Mrs. John.....5913 Washington (15)

M

MacKenzie, Mrs. Pierce....2300 E. Gum St. (14)
McCool, Mrs. Joe H.....1 Woodmere Lane (11)
McDonald, Mrs. Joseph D..4300 Lincoln Ave. (15)
Marvel, Mrs. James A...1431 Green Meadow (15)
Mathews, Mrs. James R....901 Meadow Rd. (15)
Miller, Mrs. LaVerne B.....501 Scenic Dr. (15)
Miller, Mrs. Milton J.....8201 Newburgh Rd. (15)
Mills, Mrs. Fred E.....555 S. Kelsey Ave. (14)
Mino, Mrs. Robert A.....2808 N. Shore Dr. (11)
Mullican, Mrs. Wm.....2900 Monroe Ave. (14)

N

Newnum, Mrs. Raymond L. 727 College Hwy. (14)
Newton, Mrs. Roger.....6218 Jefferson St. (15)
Nicholson, Mrs. Raymond W.
1467 Southfield Rd. (15)
Nonte, Mrs. Leo R.....714 S. Willow Rd. (14)

O

Oswald, Mrs. Robert H.....2423 Lincoln Ave. (14)

P

Pastor, Mrs. Julius W..5901 Washington Ave. (15)
Pavlick, Mrs. Theodore J.
4212 Jennings Lane (12)
Pemberton, Mrs. Jack J.
6300 Falstead Rd. (12)
Pollard, Mrs. Walter S.
5809 Green Meadow Rd. (15)
Porro, Mrs. Francis W.....909 S. Villa Dr. (14)
Pugh, Mrs. Willis L.....5204 Lincoln Ave. (15)

R

Ratcliff, Mrs. Forest..506 S. St. James Blvd. (14)
Ratcliffe, Mrs. Albert W.
510 S. E. First St. (13)
Reich, Mrs. Clarence E.
1209 N. Fulton Ave. (10)
Richey, Mrs. Clifford O.
407 Congress Ave. (15)
Rietman, Mrs. H. Jerome..2325 Lincoln Ave. (14)
Ritchie, Mrs. William D.
5201 Stringtown Rd. (11)
Ritz, Mrs. Albert S.....765 S. Boeke Rd. (14)
Rosenblatt, Mrs. Bernard B.
626 St. James Blvd. (14)
Royster, Mrs. Robert A.....34 Johnson Place (14)
Ruddick, Mrs. Hobart..Regina Pacis Home (15)
Rudolph, Mrs. Kenneth.....742 Plaza Dr. (15)
Russell, Mrs. Richard H...1015 Harrelton Ct. (15)

S

Schimmelpfennig, Mrs. Robert W.
3014 Washington Ave. (14)
Schirmer, Mrs. Robert H.
2710 Hartmetz Ave. (12)
Schneider, Mrs. Charles P.
2924 W. Maryland St. (12)
Sheehan, Mrs. E. Gregg.....934 York Rd. (15)
Shively, Mrs. Wyant J...1409 Martins Lane (15)
Siegel, Mrs. Lyle.....1152 S. Villa Dr. (14)
Sinn, Mrs. Charles M.....1509 Redwing Dr. (15)
Slaughter, Mrs. Howard C.
651 St. Mary's Dr. (15)
Slaughter, Mrs. John C...622 College Hwy. (14)
Slaughter, Mrs. Owen L.....25 Johnson Pl. (14)
Smith, Mrs. Roy M.....417 Senate (11)
Spain, Mrs. Thomas....801 S. E. Third St. (13)
Sprecher, Mrs. Herman C.
6601 Newburgh Rd. (15)
Springstun, Mrs. W. Russel..854 Lodge Ave. (14)
Stallings, Mrs. Hugh A..7601 Newburgh Rd. (15)
Sterne, Mrs. John H.....2308 E. Gum St. (14)
Stewart, Mrs. L. Ray....852 S. Alvord Blvd. (14)
Stork, Mrs. Urban
1127 Lincoln Ave., Wedgewood Apts. (14)
Strueh, Mrs. Paul E.....1207 Harrelton Ct. (15)
Swan, Mrs. Robert E.....2151 E. Gum St. (14)

T

Tager, Mrs. Stephen N...700 S. Meadow Rd. (15)
Tuholski, Mrs. James M.
6213 Newburgh Rd. (15)
Tweedall, Mrs. Daniel C...900 S. Meadow Rd. (15)

V-W

Venables, Mrs. A. J.....420 Runnymeade (14)
Vincent, Mrs. William.....7300 E. Powell (15)
Visher, Mrs. John W.
510 E. Mt. Pleasant Rd. (11)
VonderHaar, Mrs. Thomas E.
901 S. Burkhardt Rd. (15)
Walker, Mrs. William F...1220 Cullen Ave. (15)
Walter, Mrs. Paul A..4201 New Harmony Rd. (12)
Walter, Mrs. Robert F.
1514 S. Kentucky Ave. (14)
Warner, Mrs. Charles L.
4120 Bellemeade Ave. (15)
Weiss, Mrs. H. G.....1014 E. Powell Ave. (14)
Welborn, Mrs. Mell B...1832 Mt. Auburn Rd. (12)
Wilhelmus, Mrs. C. Kenneth
6929 Newburgh Rd. (15)
Wilhelmus, Mrs. Gilbert M.
5901 Newburgh Rd. (15)
Willison, Mrs. George W..605 St. Mary's Dr. (15)
Wilson, Mrs. David.....615 Willow Rd. (14)
Wilson, Mrs. John D.....921 Colony Rd. (15)
Wilson, Mrs. Ralph.....1522 Audubon Dr. (15)
Woodson, Mrs. Dan.....414 S. Kelsey (14)
Woodward, Mrs. Ben E..1032 Rosemarie Ave. (15)
Wynn, Mrs. Justice F...651 S. Weinbach Ave. (14)

Y-Z

Young, Mrs. C. Curtis, Jr...2327 Lincoln Ave. (14)
Zeier, Mrs. Francis G.....3708 Mulberry (15)

Stover, Mrs. Wendell C.
20 Lake Shore Drive, Boonville (47601)
Crist, Mrs. John R.....320 Emmick, Mt. Vernon (47620)
Hirsch, Mrs. H. L...801 Williams Dr., Mt. Vernon (47620)
Vogel, Mrs. John L...530 E. Fifth St., Mt. Vernon (47620)
Rusche, Mrs. Henry J.....Hwy. 261, Newburgh (47630)
Zwickel, Mrs. R. E.....Darby Hills, Newburgh (47630)
Ropp, Mrs. Harold E...Church St., New Harmony (47631)
Smith, Mrs. Gordon L.....R. R. 2, New Harmony (47631)

VIGO COUNTY

Speas, Mrs. Robert C...Box 22, Seelyville (47878)

Terre Haute

A

(*Zip Code* 468 *plus zone number*)

Anderson, Mrs. W. C.....380 S. 22nd St. (03)
Ault, Mrs. Roy J.....200 Lakeview Dr. (03)

B

Bannon, Mrs. William G.....2126 Ohio Blvd. (03)

Blum, Mrs. Leon L.....3200 Ohio Blvd. (03)
Bopp, Mrs. Henry W., Jr...73 Allendale Pl. (02)
Bopp, Mrs. Henry W., Sr...132 Barton Ave. (03)
Bopp, Mrs. James.....330 Hamilton Dr. (02)
Boyd, Mrs. H. Clark.....44 Long Ridge Rd. (02)
Bristol, Mrs. H. M. S.....2326 Tippecanoe (03)
Brown, Mrs. Robert R...2544 N. Ninth St. (02)
Burkle, Mrs. Robert J...128 Gardendale Rd. (03)

C-D

CaJacob, Mrs. Melville E...1000 S. Sixth St. (07)
Caldwell, Mrs. M. V.....R. R. 7, Box 449 (03)
Carpenter, Mrs. Donald J...6879 Carlisle Rd. (38)
Chau, Mrs. Andrew Y. S.....9 Monroe Blvd. (03)
Connerley, Mrs. Marion L...2824 Ohio Blvd. (03)
Conway, Mrs. Thomas J.....207 Barton Ave. (03)
Cristee, Mrs. James W.....1221 S. 6th St. (02)
Crockett, Mrs. Wayne A.....3601 Ohio Blvd. (03)
Davis, Mrs. Paul E.....1910 Boston (05)
Dierdorf, Mrs. Fred.....103 S. 23rd St. (03)
Drummy, Mrs. W. W., Jr....231 Fruitridge (03)
Dyer, Mrs. G. Wallace.....2710 Wilson Dr. (03)

E-F

Freed, Mrs. John E., Sr.....2408 N. 10th St. (04)
Freed, Mrs. John E., Jr...2425 N. Eighth St. (04)

G

Gerrish, Mrs. Don A.....5206 Clinton Rd. (05)
Gilbert, Mrs. Ivan.....2641 Crawford St. (03)
Gillotte, Mrs. J. P.....49 Bogart Dr. (03)
Goodman, Mrs. Hubert T.
220 Gardendale Rd. (03)
Gossom, Mrs. Donn R.....1904 Ohio Blvd. (03)

H

Haslem, Mrs. Ezra R.....30 Circle Dr. (03)
Haslem, Mrs. John R.....2501 Poplar St. (03)
Hausner, Mrs. Murray M...315 Hamilton Dr. (03)
Hetherington, Mrs. John A...2501 Poplar St. (03)
Hogan, Mrs. Thomas W.....332 S. 31st St. (03)
Hoover, Mrs. D. A.....2146 8th Ave. (04)
Humphrey, Mrs. Paul E...2631 N. Ninth St. (04)

J-K

Johnson, Mrs. Edward..313 Terre Vista Dr. (03)
Johnson, Mrs. Paul D., Jr.....62 AllenDale (02)
Kabel, Mrs. Robert N.....2201 Ohio Blvd. (03)
Kunkler, Mrs. Arnold W...147 Monterey Ave. (03)
Kunkler, Mrs. William C...1119 S. Center St. (07)

L

LaBier, Mrs. C. Russell....R. R. 5, Box 405 (01)
Lancet, Mrs. Robert O.....20 Nitche Dr. (03)
Lee, Mrs. James C.....12 32nd St. Ct. (03)
Lenyo, Mrs. Ludimere...700 Delaware Ave. (04)
Loewenstein, Mrs. Werner L.
1909 Ohio Blvd. (03)
Luckett, Mrs. C. L.....R. R. 2 (02)
Lyons, Mrs. L. Mason.....123 S. 21st St. (03)

M

McBride, Mrs. Noel S.....67 Allendale Pl. (02)
McCrea, Mrs. Fred R.....2517 N. Eighth St. (04)
McEwen, Mrs. James W.....107 Wren Dr. (03)
McLaughlin, Mrs. Gordon..R. R. 3, Box 128 (02)
Malone, Mrs. L. A.....2511 N. Ninth St. (04)
Mankin, Mrs. William....175 Lakeview Dr. (03)
Mason, Mrs. Lester M.....66 Allendale Pl. (02)
Mattox, Mrs. Don M.....240 Hamilton Dr. (03)
Mattox, Mrs. Ernest.....240 Hamilton Dr. (03)
Meissel, Mrs. Robert L.....10 Monroe Blvd. (03)
Miklozek, Mrs. J. E.....2204 Ohio Blvd. (03)
Mitchell, Mrs. A. M.....333 S. 22nd St. (08)
Mitchell, Mrs. John R.....2421 Ohio Blvd. (03)
Musselman, Mrs. Glen..7222 Wabash Ave. (03)

N-O-P

Nay, Mrs. Ernest O.....29 S. 20th St. (03)
Neudorff, Mrs. Louis G.....213 Barton Ave. (03)
Oliphant, Mrs. Robert W.....8 31st St. Ct. (03)
Pearce, Mrs. Roy V.....269 S. 26th St. Dr. (03)
Peterson, Mrs. D. D.....74 Doe Dr. (04)
Pu, Mrs. Pin H.....230 Briarwood Dr. (03)

R

Reed, Mrs. Robert C.....1933 S. Center St. (02)
Reynolds, Mrs. Richard J...72 Allendale Pl. (02)
Richart, Mrs. James V.....336 Hamilton Dr. (03)
Rourke, Mrs. Robert F.....R. R. 4 (02)
Rubin, Mrs. Milton M.....2401 Ohio Blvd. (03)

S

Sayers, Mrs. Frank E.....436 Bluebird Dr. (03)
Sherb, Mrs. Burton E...211 Gardendale Rd. (03)
Schott, Mrs. Edward J.....653 Oak St. (07)
Schumaker, Mrs. Robert A.....R. R. 4 (02)
Scully, Mrs. William E.....2649 Oak St. (03)
Showalter, Mrs. John R., Jr.
2511 N. Eighth St. (04)
Siebenmorgen, Mrs. Paul 2515 N. Seventh St. (07)
Silverman, Mrs. Norman M.
1142 S. Center St. (02)
Stoelting, Mrs. J. Lewis..1919 N. Seventh St. (07)
Strecker, Mrs. William L...88 Allendale Pl. (02)
Sullivan, Mrs. John M.....2242 College Ave. (03)

T-V

Topping, Mrs. Malachi C.....3505 Ohio Blvd. (03)
Veach, Mrs. William L.....101 Allendale Pl. (02)
Vance, Mrs. William C...4951 Dixie Bee Rd. (02)

W-Z

Walden, Mrs. Heinz J.....1622 Ohio St. (05)
Weber, Mrs. Joseph.....2121 N. 11th St. (04)
West, Mrs. Roger F.....86 Potomac (03)
Wheeler, Mrs. Byron C.....31 Ferndale Dr. (03)
White, Mrs. James V.....R. R. 1, Box 271 (01)
Wiedemann, Mrs. Frank E...1530 S. Sixth St. (02)
Wilson, Mrs. Fred L.....1124 S. Center St. (02)
Zwerner, Mrs. Paul F...2510 N. Eighth St. (04)

WAYNE-UNION COUNTIES

Hill, Mrs. Paul G...5 N. Foote St., Cambridge City (47327)
Kenyon, Mrs. Emil..303 Mulberry, Cambridge City (47327)
Barton, Mrs. Willoughby M.
200 N. Morton, Centerville (47330)
Shepard, Mrs. Fred F.....College Corner, Ohio (45003)
Hutchison, Mrs. Donald R.....Fountain City (47341)
Lewis, Mrs. J. Frank.....Liberty (47353)
McWilliams, Mrs. William B.....R. R. 4, Liberty (47353)

Richmond

(*Zip Code* 47374)

Adney, Mrs. Frank.....214 S. E. Parkway
Ake, Mrs. Loren.....220 S. 18th St.
Allen, Mrs. Robert T.....212 S. 21st St.
Anderson, Mrs. Robert C...Richmond State Hosp.
Ballenger, Mrs. William E.....3002 Dorothy Lane
Blossom, Mrs. Paul W.....620 S.W. 21st St.
Brooks, Mrs. G. Tanner.....415 Earlham Dr.
Clouse, Mrs. John Franklin.....414 West Dr.
Coble, Mrs. Frank H.....R. R. 3, Box 38
Daggy, Mrs. James R.....47 S. 24th St.
Dehner, Mrs. John R.....10 Sunset Dr.
Dingle, Mrs. Paul E.....206 S. 32nd St.
Dreyer, Mrs. Ralph W.....4111 Backmeyer Rd.
Ebbinghouse, Mrs. Tom.....13 Parkway Lane
Gibson, Mrs. Alois E.....209 S. 16th St.
Griffis, Mrs. Vierl C.....201 S. 23rd St.
Guthrie, Mrs. James R.....3112 S. E. Parkway
Hance, Mrs. Darwood B.....3308 Glen Hills
Harmon, Mrs. Carl J.....6 Keystone, Apt. 6
Hawk, Mrs. Edgar Allen.....1723 Chester Blvd.

Hibner, Mrs. Dan W.....2502 Locust Lane
Johnson, Mrs. George M.....115 S. 23rd St.
Lee, Mrs. Glen Ward.....Greenmount Pike
Ling, Mrs. John F.....6 Parkway Lane
Logan, Mrs. James Z.....15 Parkway Lane
Loomis, Mrs. Charles H.....Garwood Rd.
McIlroy, Mrs. Richard J.....Richmond State Hosp.
Mader, Mrs. John H.....1528 Chester Blvd.
Meredith, Mrs. Elwood J.....200 S. 20th St.
Miller, Mrs. Harold L.....560 Tingler Rd.
Millis, Mrs. Arthur B.....2301 S. "A" St.
Park, Mrs. Byron J.....303 S. 23rd St.
Plasterer, Mrs. Edward D.....212 S. 16th St.
Porter, Mrs. George S.....Spring Grove Heights
Ramsdell, Mrs. Glen A.....501 Henley Rd. S.
Sage, Mrs. Charles V.....416 S. 18th St.
Sawyer, Mrs. Harold H.....20 S. 22nd St.
Schmitt, Mrs. Robert W.....25 Circle Dr.
Sherer, Mrs. Kenneth E.....4 Parkway Lane
Shields, Mrs. Tom S.....2203 S. "E" St.
Short, Mrs. John A.....111 S.W. "G"
Snyder, Mrs. Morris C.....212 S. 22nd St.
Spellmeyer, Mrs. John C.....3811 Pinehurst Dr.
Stepleton, Mrs. John D.....4220 Bockmeyer Rd.
Stilwell, Mrs. William R.....2607 S. "C" Pl.
Sweet, Mrs. Howard E.....Garwood Rd.
Wambo, Mrs. John Mack.....16 S.W. 18th
Wanninger, Mrs. Horace.....315 S. 15th St.
Warrick, Mrs. Francis B.....2106 South "B" St.
Weitemier, Mrs. Raymond A.....25 S. 25th St.
Wertenberger, Mrs. Morris.....Greenmount Pike
Wiland, Mrs. Olin K.....2603 S. "C" Pl.
Wynegar, Mrs. David E.....Richmond State Hosp.
Zore, Mrs. Joseph J.....2603 Reeveston Rd.

WELLS COUNTY

Bluffton
(*Zip Code* 46714)

Boonstra, Mrs. Charles E.
1110 Highland Pk. Circle
Bradley, Mrs. Louis F.....Country Club Addition
Caylor, Mrs. Charles H.....1220 Sycamore Lane
Caylor, Mrs. Harold D.....411 W. Market St.
Caylor, Mrs. Truman E.....920 River Rd.
Collins, Mrs. Jack T.....R. R. 3
Cook, Mrs. Robert G.....1225 Summit Ave.
Dorrance, Mrs. Thomas O.....302 Northwood Dr.
Eisaman, Mrs. Jack L.....1011 Riverview Dr.
Graff, Mrs. Russell E.....920 Sycamore Lane
Huebner, Mrs. Gilbert.....1120 River Rd.
Huffman, Mrs. Galen....Box 27, River Road East
Jackson, Mrs. Charles E.....1012 Riverview Dr.
Kephart, Mrs. S. Bruce.....P. O. Box 12
McCaslin, Mrs. Charles.....717 Riverview Dr.
Matzen, Mrs. Richard N.....R.R. 3
Mayock, Mrs. Peter P.....225 W. Central Ave.
Meier, Mrs. Donald W.....1205 Summit Ave.
Mock, Mrs. Farrell.....1215 Echo Lake
Mudrony, Mrs. Jeno.....Country Club Estates
Panos, Mrs. Constantine G.....Elm Grove Road
Phillips, Mrs. John F.....411 W. Washington
Pietz, Mrs. David G.....322½ E. Central Ave.
Pitts, Mrs. Neal C.....1316 Garr St.
Rusher, Mrs. Merrill W.....920 Ranch Rd.
Schaefer, Mrs. Joseph C.....Box 217
Shaw, Mrs. Glenn R.....926 Riverview Dr.
Sorg, Mrs. David.....734 Fort Wayne Rd.
Steckbeck, Mrs. Robert L.....1110 Summit Ave.
Stevens, Mrs. Adam.....203 W. Diamond St.
Strehler, Mrs. Donald A.....R. R. 4
Symon, Mrs. William E.....632 S. Main St.
Talbert, Mrs. Pierre C.....508 W. Cherry St.
Yoder, Mrs. Richard P.....931 S. Wayne St.

Willard, Mrs. Richard D.
P. O. Box 162, Liberty Mills (46946)

WHITE COUNTY

Derhammer, Mrs. George L.....Brookston (47923)
Fedor, Mrs. Thomas.....Monon (47959)

Monticello
(*Zip Code* 47960)

Beck, Mrs. David C.....R. R. 3
Carney, Mrs. John.....R. R. 2
Dickerson, Mrs. W. Martin....218 E. Market St.
Fields, Mrs. Max.....R. R. 3
Hibner, Mrs. Nolan A.....214 S. Illinois
Jehanyar, Mrs. M. Ali.....R. R. 5
McClure, Mrs. Stanley E.....R. R. 1
Morris, Mrs. Warren V.....R. R. 3

Baynes, Mrs. Frank L.....Wolcott (47995)

WHITLEY COUNTY

Minick, Mrs. Linus J.....N. Line St., Churubusco (46723)

Columbia City
(*Zip Code* 46725)

Hamilton, Mrs. Thomas G.....R. R. 3
Heritier, Mrs. C. Jules.....700 Hill Dr.
Langohr, Mrs. John L.....321 N. Main St.
Lehmberg, Mrs. Otto F. C.....706 West Park Dr.
Niccum, Mrs. Warren L.....Grove Park
Reid, Mrs. Donald B.....West Park Dr.
Roth, Mrs. James R.....323 N. Chauncey St.
Thompson, Mrs. Frank M.....526 E. Jefferson
Vogel, Mrs. John L.....Grove Park
Wait, Mrs. Jerome H.....R. R. 5
Wilson, Mrs. John S.....R. R. 3

Stalter, Mrs. Gaylord W...North Webster (46555)
Garber, Mrs. Paul A.
305 E. Seminary, Greencastle (46135)
Huffman, Mrs. Verlin P.
701 State St., South Whitley (46787)

MEMBERS-AT-LARGE

Apple, Mrs. Eddie R.
503 W. Market St. Salem, Washington (47167)
Artz, Mrs. Richard W.
606 Darling, Angola, Steuben (46703)
Beardsley, Mrs. Frank A.
751 E. South St., Frankfort, Clinton (46041)
Benz, Mrs. Jesse C.
Box 115, Marengo, Harrison-Crawford (47140)
Blessinger, Mrs. Louis H.
738 N. Capitol Ave., Corydon, Harrison-Crawford (47112)
Bogardus, Mrs. Carl R.
Kyana Farm, Austin, Scott (47102)
Burkhardt, Mrs. Boyd
328 N. West St., Tipton, Tipton (46072)
Cameron, Mrs. Don F.
313 E. Maumee, Angola, Steuben (46703)
Carneal, Mrs. Thomas E.
305 S. Market St., Winamac, Pulaski (46996)
Castro, Mrs. Ignacio B., Jr.,
685 Wanda St., Scottsburg, Scott (47170)
Coddens, Mrs. A. L.
Box 342, Earl Park, Benton (47942)
Coleman, Mrs. F. B.,
Box 98, Waterloo, Fayette (46793)
Compton, Mrs. George L.
221 N. Independence, Tipton, Tipton (46072)
Compton, Mrs. R. L.
1867 Trevilian Way, Louisville 5, Ky. (40205)
Ericson, Mrs. Harold L.
Box 366, Windfall, Tipton (46076)
Farris, Mrs. John J.....2 Brettwood Dr., Washington, Daviess (47501)
Fisher, Mrs. John E.,
206 E. Main St., Attica, Fountain (47918)

Fong, Mrs. Theodore C. C.....316 Bellaire Dr., Madison, Jefferson (47251)
Graves, Mrs. Noel S.....404 W. Main, Vevay, Switzerland (47043)
Hall, Mrs. Donald L.
R. R. 1, Petersburg, Pike (47567)
Hare, Mrs. Francis W.....R. R. 5, Madison, Switzerland (47250)
Hathaway, Mrs. Clayton B.
410 N. Broadway, Butler, DeKalb (46721)
Hisrich, Mrs. Lloyd W.
6 Henry St., Batesville, Ripley (47006)
Hoffman, Mrs. Max N.....227 Elm Dr., Covington, Fountain (47932)
Hollenburg, Mrs. Edward L.
501 Huddleston Rd., Winamac, Pulaski (46996)
Huckleberry, Mrs. Irvin E...502 W. Mulberry St., Salem, Adams (47167)
Hughes, Mrs. W. Bradley,
P. O. Box 368, Waterloo, Fayette (46793)
Humphrey, Mrs. E. M.....1005 Orchard Dr., Covington, Fountain (47932)
Jinnings, Mrs. Loren..807 S. Lee, Garrett, DeKalb (46738)
Kantzer, Mrs. Floyd B.
608 E. Keyser St., Garrett, DeKalb (46738)
Kesseric, Mrs. Nick E.
French Lick, Orange (47432)
Kincaid, Mrs. Raymond.....R. R. 1, Tipton, Tipton (46072)
Kurtz, Mrs. Wm. A.....R. R. 1, Tipton, Tipton (46072)
Lett, Mrs. E. Briscoe.....502 W. 1st St., Loogootee, Daviess (47553)
Lindsay, Mrs. H. B.....1108 Bedford Rd., Washington, Daviess (47501)
Lynch, Mrs. Otis R.
Marengo, Crawford (47140)
Maris, Mrs. Lee J.
606 Brady St., Attica, Fountain (47918)
Mason, Mrs. Donald G.
401 E. Maumee, Angola, Steuben (46703)
Maurer, Mrs. Robert
1115 N. Meridian, Brazil, Clay (47834)
May, Mrs. R. Milton..Laconia, Harrison (47135)
McClain, Mrs. Marvin L.
384 E. McClain, Scottsburg, Scott (47170)
McConnell, Mrs. William C.
512 N. Meridian, Sunman, Ripley (47041)
McKinney, Mrs. Donald L.
Box 398, Otterbein, Benton (47970)
McNaughton, Mrs. Lawrence M.
6 Brettwood Dr., Washington, Daviess (47501)
Mehne, Mrs. Richard G.
503 N. Walnut, Brazil, Clay (47834)
Mount, Mrs. Mathias S.
340 W. Mechanic, Bloomfield, Greene (47424)
Omstead, Mrs. Milton
110 S. Sixth St., Petersburg, Pike (47567)
Pearson, Mrs. William E.
290 N. Wabash, Wabash, Wabash (46992)
Person, Mrs. Theodore C.....600 N. Main, Veedersburg, Fountain (47987)
Petrich, Mrs. P. R.....409 E. Washington, Attica, Fountain (47918)
Pratt, Mrs. Ralph M.....2325 Blackmore Pl., Madison, Switzerland (47251)
Rang, Mrs. Arthur A.....211 N. E. 9th St., Washington, Daviess-Martin (47501)
Ringer, Mrs. William A.
408 E. Pike, Attica, Fountain (47918)
Row, Mrs. George S.
101 E. Jefferson St., Osgood, Ripley (47037)
Schrepferman, Mrs. Wayne
R. R. 2, Hamilton, Steuben (46742)
Scott, Mrs. Irvin H.....320 W. Washington, Sullivan, Sullivan (47882)
Seat, Mrs. Marshall H...310 Hefron, Washington, Daviess (47501)
Seward, Mrs. George.....201 W. Main St., North Manchester, Wabash (46962)
Showalter, Mrs. John P.....R. R. 5, Angola, Steuben (46703)
Silvers, Mrs. L. Michael.....602 N. Elm St., North Manchester, Wabash (46962)
Sloan, Mrs. W. Keith..340 Bunton Lane, Madison Switzerland (47251)
Smith, Mrs. Lloyd H.....R. R. 2, Briarwood Add., N. Manchester, Wabash (46962)
Spears, Mrs. John K.
312 N. Gospel St., Paoli, Orange (47454)
Stephens, Mrs. Lowell R.....P. O. Box 185, Covington, Fountain (47932)
Stoops, Mrs. Jean T.....563 N. Miami, Wabash, Wabash (46992)
Stouder, Mrs. Albert E.....407 S. West St., Kempton, Tipton (46049)
Sugarman, Mrs. Benjamin E.
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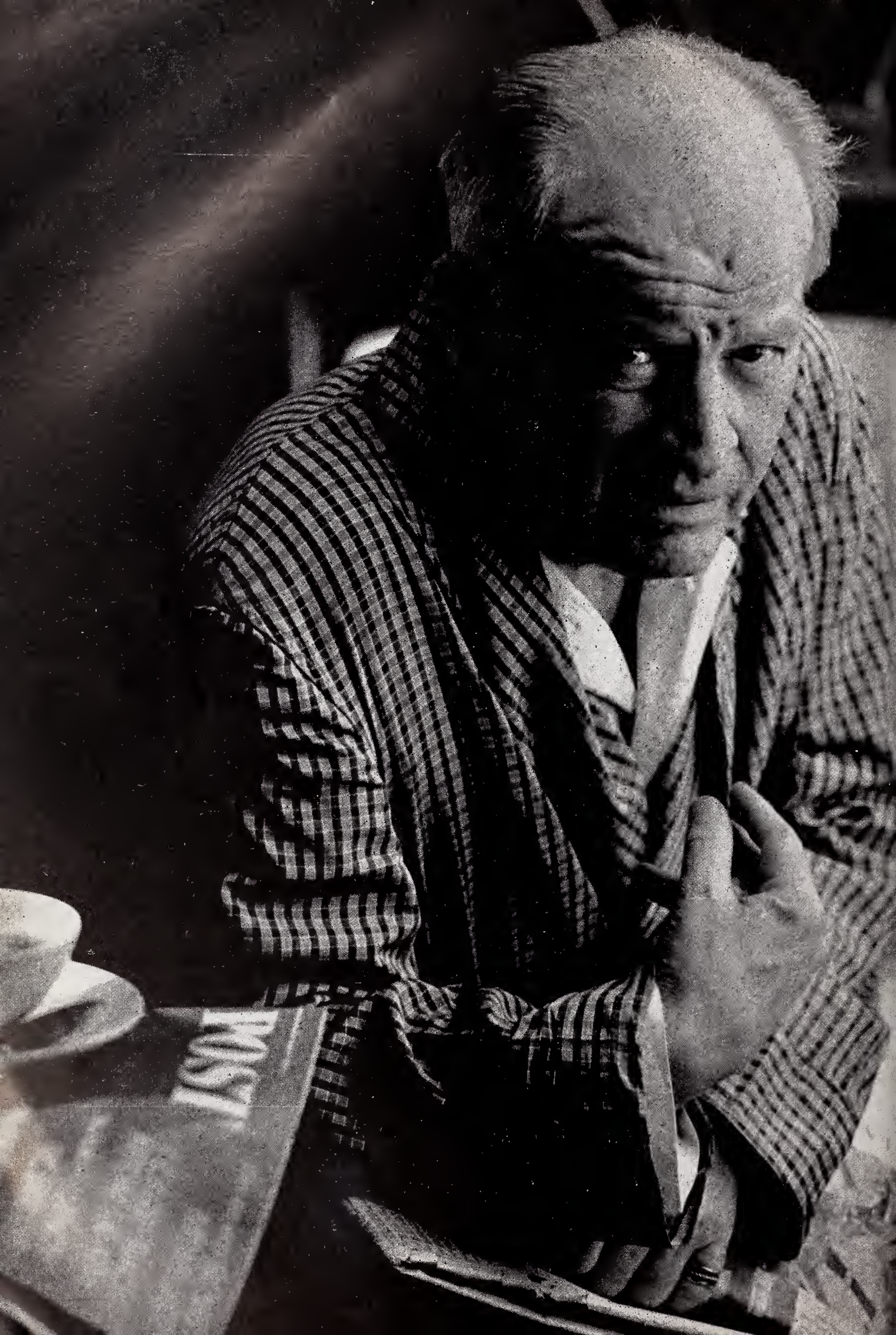
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April, 1967

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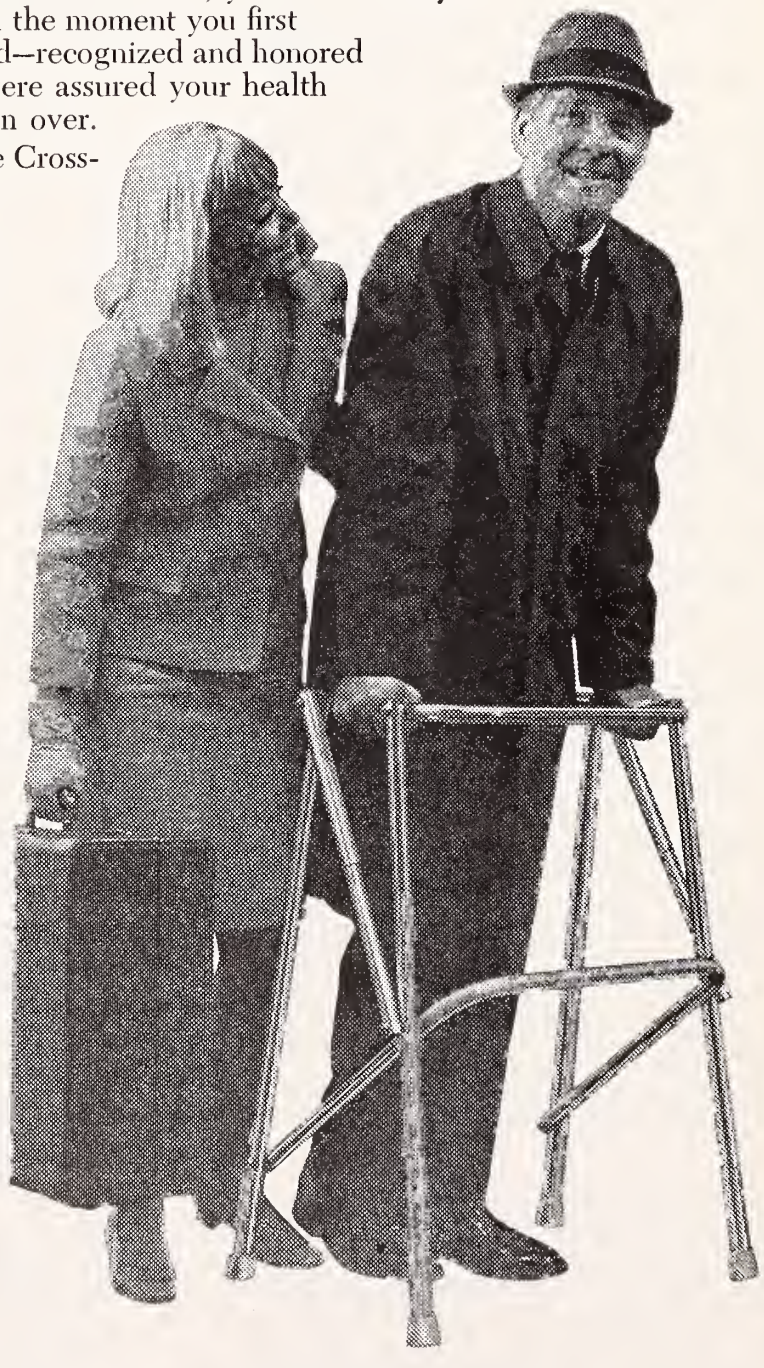
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(One of a series of ads being run in key Hoosier newspapers)

Professional Medical and Allied Organizations

Due to the additional content of the Yearbook, cut-off date for changes in the following groups was in April. Some have changed in the interim. However, it is felt that where officers have changed, a query to those listed here will put interested persons in contact with such groups.

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* Dr. Rouse will be installed at the June meeting of the AMA. The President-Elect had not been named at the time this issue went to press. His election will be announced in the July *Journal*.

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About Our Cover

June is National Dairy Month and National Barbeque Month. It contains Let's Play Golf Week; National Flag Week; National Little League Baseball Week; Flag Day; Father's Day; the end of the school year and the official beginning of summer. June also heralds the beginning of swimming . . . sunburns . . . flies . . . cutting the grass . . . gardening . . . outdoor barbeques . . . boating . . . tennis . . . cleaning the garage . . . washing the car . . . painting the house . . . watering the lawn . . . cutting grass again . . . water skiing . . . drive-in movies . . . sun-bathing . . . going fishing . . . vacations . . . Bermuda shorts . . . "little boy" haircuts . . . sunback dresses . . . golf . . . thongs, sandles or Red Ball Jets . . . the bright colors of the new summer fashions . . . failure of the air conditioning on the hottest days of the summer . . . ice tea, lemonade and watermelon . . . bicycle riding . . . picnicking . . . horseback riding . . . baseball games . . . weeding the flower beds . . . pinching the petunias . . . spraying the roses . . . suckering the tomatoes . . . corn on the cob . . . potato salad and baked beans . . . reruns on TV . . . sand in the house and what do you do with soggy, wet bathing suits . . . a rash of "swimmer's ears" . . . poison ivy . . . athlete's foot . . . splinters.—J.F.S.

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Annual Meeting Dates of Professional Medical and Allied Organizations

AMERICAN MEDICAL ASSOCIATION ANNUAL CONVENTION
Date June 18-22, 1967
Place Atlantic City, N.J.

NORTHERN INDIANA PSYCHIATRIC SOCIETY
Date Fourth Wednesday of every month, September through June
Place For location and program, inquire Beatty Memorial Hospital, Westville

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of the month, October through May, excluding December
Place The Athenaeum, Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Date July 18-20, 1967
Place French Lick Sheraton Hotel, French Lick

INDIANA HOSPITAL ASSOCIATION
Date Nov. 1-3, 1967
Place French Lick-Sheraton Hotel, French Lick

INDIANA STATE MEDICAL ASSOCIATION CONVENTION
Date October 9-12, 1967
Place Indianapolis

INDIANA STATE NURSES ASSOCIATION
Date Oct. 12-14, 1967
Place French Lick-Sheraton Hotel, French Lick

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date May 17-18, 1968
Place Stouffer Inn, Indianapolis



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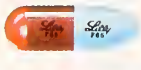
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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—April, 1967

Disease	Apr. 1967	Mar. 1967	Feb. 1967	Apr. 1966	Apr. 1965
Animal Bites	1055	771	399	844	738
Chickenpox	341	584	456	481	324
Conjunctivitis	109	143	98	134	70
Diphtheria	0	0	1	0	0
Dysentery, Unspecified	34	83	117	35	34
Gonorrhea	303	495	723	368	322
Impetigo	92	98	73	68	48
Infectious Hepatitis	75	104	85	34	32
Infectious Mononucleosis	84	85	62	98	42
Influenza	1050	2049	68	1694	652
Measles (Rubeola-Rubella)	257	247	126	1456	523
Meningitis, Meningococcal	5	6	4	12	6
Meningitis, Other	2	9	9	2	7
Mumps	1008	1134	702	402	208
Pertussis (whooping cough)	21	28	10	9	13
Pneumonia	333	510	329	548	199
Poliomyelitis	0	0	0	0	0
Streptococcal Infection	744	1538	953	1178	458
Syphilis					
Primary & Secondary	8	17	7	4	6
All Other Syphilis	87	105	68	94	114
Tinea Capitis	9	8	19	13	5
Tuberculosis (Active)	96	128	113	59	92

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April 1, 1967

**INDICATES APPROVED MEDICARE HOSPITAL

ADAMS COUNTY

**Adams County Memorial Hospital.
804 Mercer Ave., Decatur.
Mr. Edwin H. Kauffman, Adm.
Beds: 72

ALLEN COUNTY

**Parkview Memorial Hospital, Inc.
2200 Randalia Dr., Fort Wayne.
Mr. Mark Slen, Adm.
Beds: 525

Irene Byron Hospital.
12515 Lima Rd., R.R. 13, Fort Wayne
O. T. Kidder, M.D., Adm. & Med. Dir.
Beds: 203

**The Lutheran Hospital of Fort Wayne.
3024 Fairfield Ave., Fort Wayne.
Mr. Edgar C. Kruse, Adm.
Beds: 464

**St. Joseph's Hospital.
700 Broadway, Fort Wayne.
Sister M. JoAnn, Adm.
Beds: 412

BARTHOLOMEW COUNTY

**Bartholomew County Hospital.
2400 East 17th St., Columbus.
Miss Olive M. Murphy, R.N., Adm.
Beds: 184

BLACKFORD COUNTY

**Blackford County Hospital.
503 E. Van Cleve St., Hartford City.
Mr. Charles D. Swint, Adm.
Beds: 46

BOONE COUNTY

**Witham Memorial Hospital.
1124 N. Lebanon St., Lebanon.
Mr. John H. Luff, Adm.
Beds: 73

CASS COUNTY

**Memorial Hospital.
1101 Michigan Ave., Logansport.
Mr. Herbert L. Fromm, Adm.
Beds: 98

**St. Joseph Hospital.
26th and North Sts., Logansport.
Sister M. Vincetta, Adm.
Beds: 110

CLARK COUNTY

**Clark County Memorial Hospital.
210 Sparks Ave., Jeffersonville.
Mr. John C. Blankenbeckler, Adm.
Beds: 96

CLAY COUNTY

**Clay County Hospital.
1206 E. National Ave., Brazil.
Mrs. Madge Scobell, Adm.
Beds: 96

CLINTON COUNTY

**Clinton County Hospital.
1300 S. Jackson St., Frankfort
Mr. William Russell, Adm.
Beds: 83

DAVIESS COUNTY

**Daviess County Hospital.
1314 Grand Ave., Washington.
Mr. Maurice L. Gray, Adm.
Beds: 137

DEARBORN COUNTY

**Dearborn County Hospital.
600 Wilson Creek Rd., Lawrenceburg.
Mr. Homer Conner, Adm.
Beds: 88

DECATUR COUNTY

**Decatur County Memorial Hospital.
720 N. Lincoln St., Greensburg.
Mr. Bernard Harvey, Adm.
Beds: 84

DEKALB COUNTY

**DeKalb Memorial Hospital, Inc.
East Seventh St., Auburn.
Mr. R. O. King, Adm.
Beds: 83

**Dr. Bonnell M. Souder Hospital, Inc.
206 W. 7th St., Auburn.
Bonnell M. Souder, M.D., Adm.
Beds: 24

**Garrett Community Hospital, Inc.
220 S. Ijams St., Garrett.
Mr. Richard G. Bajus, Adm.
Beds: 35

DELAWARE COUNTY

**Ball Memorial Hospital.
2401 University Ave., Muncie.
Mr. Walter G. Ebert, Adm.
Beds: 465

DUBOIS COUNTY

**Memorial Hospital.
800 West 9th St., Jasper.
Sister Mary Barbara, Adm.
Beds: 80

**St. Joseph's Hospital.
530 4th St., Huntingburg.
Sister M. Johnita, Adm.
Beds: 57

Continued

* Approved by the Indiana Council for Hospital Licensure and the Indiana State Board of Health.

APPROVED HOSPITALS

Continued

ELKHART COUNTY

****Elkhart General Hospital.**
600 East Boulevard, Elkhart.
Mr. Emery K. Zimmerman, Adm.
Beds: 232

****Goshen General Hospital.**
200 High Park Avenue, Goshen.
Mr. Kenneth Swanson, Adm.
Beds: 107

FAYETTE COUNTY

****Fayette Memorial Hospital.**
1941 Virginia Ave., Connersville.
Mr. Jack G. Fougerousse, Adm.
Beds: 88

FLOYD COUNTY

****Memorial Hospital of Floyd County.**
1850 State St., New Albany.
Mr. William I. Fender, Jr., Adm.
Beds: 210

Southern Indiana Tuberculosis Hospital.
New Albany.
William D. May, M.D., Supt.
Beds: 150

FULTON COUNTY

****Woodlawn Hospital.**
624 Pontiac St., Rochester.
Mr. Harold E. Hill, Adm.
Beds: 61

GIBSON COUNTY

****Gibson General Hospital.**
1808 Sherman Drive, Princeton.
Mr. Herman A. Kohlman, Adm.
Beds: 75

GRANT COUNTY

****Marion General Hospital.**
Wabash and Euclid, Marion.
Mr. John W. Green, Adm.
Beds: 244

GREENE COUNTY

****Freeman Greene County Hospital.**
410 "A" St., N.E., Linton.
Mr. Malcom Clippinger, Adm.
Beds: 73

HAMILTON COUNTY

****Riverview Hospital.**
395 Westfield Rd., Noblesville.
Mr. Peter R. Mariani, Adm.
Beds: 86

HANCOCK COUNTY

****Hancock County Memorial Hospital.**
800 North State Street, Greenfield.
Mr. C. L. Morris, Adm.
Beds: 83

HARRISON COUNTY

****Harrison County Hospital.**
R. R. 4, Box 33 H, Corydon.
Mr. John R. Webb, Adm.
Beds: 49

HENDRICKS COUNTY

****Hendricks County Hospital.**
1000 E. Main St., Danville.
Mr. Harry T. Haver, Jr., Adm.
Beds: 70

HENRY COUNTY

****Henry County Hospital.**
Rural St., New Castle.
Mr. Herbert A. Schacht, Adm.
Beds: 194

HOWARD COUNTY

****Howard Community Hospital.**
3500 S. LaFountain St., Kokomo.
Mr. George R. Banjak, Adm.
Beds: 109

****St. Joseph Memorial Hospital.**
1907 W. Sycamore St., Kokomo.
Mr. Robert D. Jacobs, Adm.
Beds: 170

HUNTINGTON COUNTY

****Huntington County Hospital.**
1215 Etna Ave., Huntington.
Mr. Carl S. Smyth, Adm.
Beds: 100

JACKSON COUNTY

****Jackson County Schneck Memorial Hospital.**
Bruce and Poplar St., Seymour.
Mr. Ralph W. Keyes, Adm.
Beds: 87

JASPER COUNTY

****Jasper County Hospital.**
E. Grace St., Rensselaer.
Mrs. Ruth Schumaker, R.N., Adm.
Beds: 60

JAY COUNTY

****Jay County Hospital.**
505 W. Arch St., Portland.
Mr. Warren Phemister, Adm.
Beds: 100

JEFFERSON COUNTY

****The King's Daughters' Hospital.**
112 Presbyterian Ave., Madison.
Mr. W. A. McAlexander, Adm.
Beds: 109

JOHNSON COUNTY

Indiana Masonic Home Hospital.
690 State St., Franklin.
Mr. Roy Turner, Jr., Supt.
Beds: 197

****Johnson County Memorial Hospital.**
P.O. Box 368, Franklin.
Mr. George P. Goshorn, Adm.
Beds: 128

KNOX COUNTY

****Good Samaritan Hospital.**
410 S. 7th St., Vincennes.
Mr. Charles Arends, Adm.
Beds: 222

Hillcrest Tuberculosis Hospital.
Vincennes.
J. Frank W. Stewart, M.D., Supt.
Beds: 47

KOSCIUSKO COUNTY

****Murphy Medical Center.**
101 W. Winona Ave., Warsaw.
Mrs. Hazel J. Murphy, Adm.
Beds: 68

LAGRANGE COUNTY

****LaGrange County Hospital.**
R.R. 1, LaGrange.
Mr. James R. Winkler, Adm.
Beds: 34

LAKE COUNTY

James O. Parramore Hospital.
106 Road O, Crown Point.
Norman J. Wilson, M.D., Adm.
Beds: 144

****The Methodist Hospital of Gary, Inc.**
1600 W. 6th Ave., Gary.
Everett A. Johnson, Ph.D., Adm.
Beds: 370

****Our Lady of Mercy Hospital.**
U. S. Highway 30, Dyer.
Sister M. Frances Xavier, Adm.
Beds: 200

****St. Catherine Hospital of East Chicago.**
4321 Fir St., East Chicago.
Sister M. Martine, R.N., Adm.
Beds: 371

****St. Margaret Hospital.**
25 Douglas St., Hammond.
Sister M. Delphina, R.N., Adm.
Beds: 395

****St. Mary Mercy Hospital of Gary, Inc.**
540 Tyler St., Gary.
Sister M. Cornelia, R.N., Adm.
Beds: 238

LAPORTE COUNTY

****LaPorte Hospital, Inc.**
205 "E" St. & 215 Pine Lake Ave., LaPorte.
Mr. David D. Kramer, Adm.
Beds: 150

****Memorial Hospital of Michigan City.**
5th and Pine Sts., Michigan City.
Mr. Byron N. Whitford, Adm.
Beds: 76

****St. Anthony Hospital.**
Wabash and Ann Sts., Michigan City.
Sister M. Verenis, Adm.
Beds: 100

****Walters Hospital, Inc.**
3714 S. Franklin St., Michigan City.
Mr. Raymond A. Anderson, Adm.
Beds: 90

LAWRENCE COUNTY

****Dunn Memorial Hospital.**
1616 23rd St., Bedford.
Mrs. Helen Boyer, R.N., Adm.
Beds: 97

MADISON COUNTY

****Community Hospital of Anderson and Madison County.**
1515 N. Madison Ave., Anderson.
P.O. Box 2479.
Mr. Louis H. Furlong, Adm.
Beds: 142

****Mercy Hospital, Inc.**
1331 South "A" St., Elwood.
Sister M. Andrea, R.N., Adm.
Mr. Edward Topek, Acting Adm.
Beds: 50

****St. John's Hickey Memorial Hospital.**
127 W. 19th St., Anderson.
Sister M. Theodora, Adm.
Beds: 224

MARION COUNTY

****Community Hospital of Indianapolis, Inc.**
1500 N. Ritter Ave., Indianapolis.
Mr. W. C. McLin, Adm.
Beds: 603

****Indiana University Medical Center Hospitals.**
1100 W. Michigan St., Indianapolis.
Mr. Elton T. Ridley, Dir. of Hosps.
Beds: 519

****Marion County General Hospital.**
960 Locke St., Indianapolis.
Arvine G. Popplewell, M.D., Dir. of Hosps.
Beds: 594

****Winona Memorial Hospital.**
3202 N. Meridian St., Indianapolis.
Mr. John D. Worley, Jr., Adm.
Beds: 320

****Methodist Hospital of Indiana, Inc.**
1604 N. Capitol Ave., Indianapolis.
Mr. Jack A. L. Hahn, Adm.
Beds: 870

St. Elizabeth's Maternity Hospital and Infant Home.
2500 Churchman Ave., Indianapolis.
Rev. Donald Schmidlin, Adm.
Beds: 4

****St. Francis Hospital.**
101 N. Seventeenth St., Beech Grove.
Sister M. Sponsaria, Adm.
Beds: 300

****St. Vincent's Hospital.**
120 W. Fall Creek Parkway, Indianapolis.
Sister Carlos, Adm.
Beds: 325

University Heights Hospital, Inc.
3350 Carson Ave., Indianapolis.
Mr. Donald L. Ciolli, Adm.
Beds: 122

MARSHALL COUNTY

****Community Hospital of German Township, Inc.**
411 W. Grant St., Bremen.
Mr. Robert Moat, Adm.
Beds: 18

Continued

APPROVED HOSPITALS

Continued

**Marshall County Parkview Hospital.
1401 N. Michigan St., Plymouth.
Miss Lela Diefenbaugh, R.N., Adm.
Beds: 67

MIAMI COUNTY

**Dukes Memorial Hospital.
275 West 12th St., Peru.
Mr. Robert L. Allman, Adm.
Beds: 80

MONROE COUNTY

**Bloomington Hospital.
605-625 W. Second St., Bloomington.
Mr. Roland E. Kohr, Adm.
Beds: 185

MONTGOMERY COUNTY

**Montgomery County Culver Union Hospital.
308 Binford St., Crawfordsville.
Mr. William Stoltz, Adm.
Beds: 83

MORGAN COUNTY

**Kendrick Memorial Hospital, Inc.
130 N. Indiana St., Mooresville.
William Kendrick, M.D., Adm.
Beds: 28

**Morgan County Memorial Hospital.
St. Rd. 252, Martinsville.
Mr. Ernest Baughman, Adm.
Beds: 80

NEWTON COUNTY

**George Ade Memorial Hospital.
Ind. Highway #16.
Brook, Ind.
Mrs. Helen M. Borman, Adm.
Beds: 40

NOBLE COUNTY

**McCray Memorial Hospital.
South Park Dr., Kendallville.
Mr. Ronald N. Strand, Adm.
Beds: 37

ORANGE COUNTY

**Orange County Hospital.
Sandy Hook Road, Paoli.
Miss Kathryn Landers, R.N., Adm.
Beds: 36

PARKE COUNTY

Indiana State Hospital for Chest Diseases.
R.R. 1, Rockville.
Gerald F. Kempf, M.D., Supt.
Beds: 120

PERRY COUNTY

**Perry County Memorial Hospital.
Box 26, Tell City.
Mr. Paul E. Hess, Acting Adm.
Beds: 58

PORTER COUNTY

**Porter Memorial Hospital.
814 LaPorte Ave., Valparaiso.
Mr. Arthur S. Malasto, Adm.
Beds: 230

PULASKI COUNTY

**Pulaski Memorial Hospital.
State Road 14, East, Winamac.
Mr. Benjamin L. Underwood, Adm.
Beds: 37

PUTNAM COUNTY

**Putnam County Hospital.
330 Greenwood Ave., Greencastle.
Mr. James F. Shepherd, Adm.
Beds: 79

RANDOLPH COUNTY

**Randolph County Hospital.
Oak Street, Winchester.
Mr. Lacy C. Barnett, Adm.
Beds: 60

**Union City Memorial Hospital Association.
900 N. Columbia St., Union City.
Miss Kathryn E. Larrance, Adm.
Beds: 50

RIPLEY COUNTY

**Margaret Mary Hospital.
R. R. 3, Batesville.
Sister M. Theresa, Adm.
Beds: 55

RUSH COUNTY

**Rush County Hospital.
1300 N. Main St., Rushville.
Mr. Edward Kucinski, Adm.
Beds: 49

SCOTT COUNTY

**Scott County Memorial Hospital.
Highway 31 North, Scottsburg.
Mr. Richard J. Reichow, Acting. Adm.
Beds: 34

SHELBY COUNTY

**William S. Major Hospital.
150 W. Washington St., Shelbyville.
Mr. Jack R. Martin, Adm.
Beds: 110

ST. JOSEPH COUNTY

Healthwin Hospital.
20531 West Darden Road, South Bend.
E. W. Custer, M.D., Adm.
Beds: 130

**Memorial Hospital of South Bend.
615 N. Michigan St., South Bend.
Mr. Richard W. Trenkner, Adm.
Beds: 374

**St. Joseph Hospital.
215 W. 4th St., Mishawaka.
Sister M. Maureen, Adm.
Beds: 101

**St. Joseph's Hospital.
811 E. Madison St., South Bend.
Sister M. Cecilian, Adm.
Beds: 344

**South Bend Osteopathic Hospital.
2515 E. Jefferson Blvd., South Bend.
A. F. Kull, D.O., Adm.
Beds: 105

STARKE COUNTY

**Starke Memorial Hospital.
201 E. Culver Road, Knox.
Mr. Francis T. O'Brien, Adm.
Beds: 19

STEUBEN COUNTY

**Cameron Memorial Hospitals, Inc.
416 E. Maumee, Angola.
Mr. F. W. Schwerin, Adm.
Beds: 51

**Elmhurst Hospital, Inc.
909 W. Maumee, Angola.
Mr. Thomas R. Alwood, Adm.
Beds: 29

SULLIVAN COUNTY

**Mary Sherman Hospital.
320 N. Section St., Sullivan.
Mr. William H. Sluder, Adm.
Beds: 120

TIPPECANOE COUNTY

**Lafayette Home Hospital, Inc.
2400 E. South St., Lafayette.
Mr. Franklin E. Simek, Adm.
Beds: 248

**Purdue University Student Health Center.
Purdue University.
West Lafayette, Ind.
Loyal W. Combs, M.D., Adm.
Beds: 74

**St. Elizabeth Hospital.
1501 Hartford Street, Lafayette.
Sister M. Amelia, R.N., Adm.
Beds: 341

TIPTON COUNTY

**Tipton County Memorial Hospital.
1032 South Main Street, Tipton.
Mr. James C. Talley, Adm.
Beds: 71

VANDERBURGH COUNTY

Boehne Tuberculosis Hospital.
Boehne Hospital Rd., Station B., Evansville.
Mr. Henry L. Harness, Adm.
Beds: 37

**Protestant Deaconess Hospital.
600-700 Mary St., Evansville.
Mr. David A. Johnson, Adm.
Beds: 523

**St. Mary's Hospital, Inc.
3700 Washington Ave., Evansville.
Sister Juliana, Adm.
Beds: 402

**Welborn Memorial Baptist Hospital, Inc.
412 S.E. 4th St., Evansville.
Mr. Nolan R. Lackey, Adm.
Beds: 210

VERMILLION COUNTY

**Vermillion County Hospital.
801 S. Main St., Clinton.
Miss Beulah Fisher, R.N., Adm.
Beds: 72

VIGO COUNTY

**St. Anthony Hospital.
1021 S. 6th St., Terre Haute.
Sister M. Henrita, Adm.
Beds: 300

**Union Hospital, Inc.
1606 N. 7th St., Terre Haute.
Mr. Joseph B. Mackey, Adm.
Beds: 256

WABASH COUNTY

**Wabash County Hospital.
670 N. East St., Wabash.
Mr. Gerald E. Almond, Adm.
Beds: 127

WARREN COUNTY

**Community Hospital.
412 N. Monroe St., Williamsport.
Mr. George H. James, Jr., Adm.
Beds: 29

WASHINGTON COUNTY

**Washington County Memorial Hospital.
911 N. Shelby Street, Salem.
Mr. John R. Webb, Adm.
Beds: 60

WAYNE COUNTY

**Reid Memorial Hospital.
Spring Grove, Richmond.
Mr. G. Dale Splitstone, Adm.
Beds: 333

WELLS COUNTY

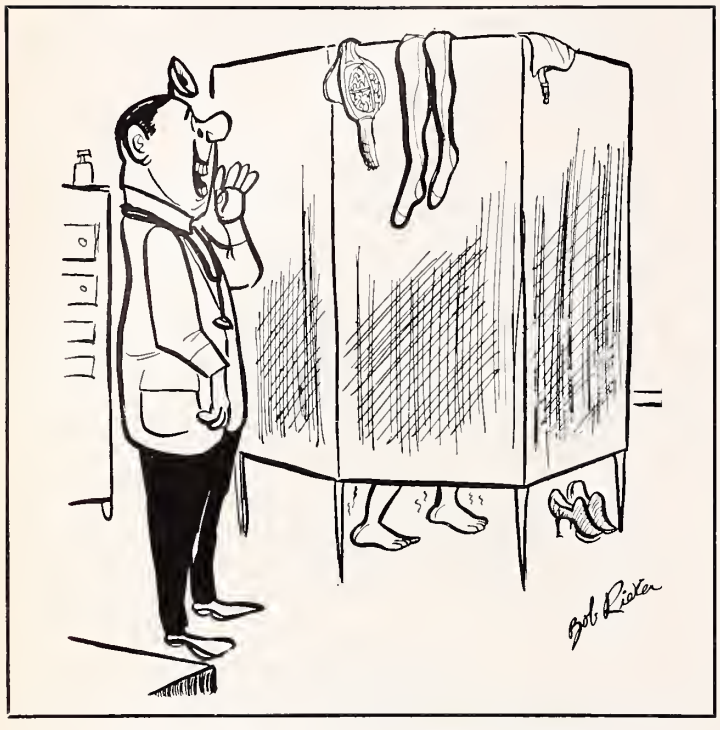
**Clinic Hospital.
309 S. Main St., Bluffton.
Mr. Ronald M. Adams, Adm.
Beds: 164

**Wells County Hospital.
1116 S. Main St., Bluffton.
Mrs. Dorothy Elett Radkey, R.N., Adm.
Beds: 50

WHITE COUNTY

**White County Memorial Hospital.
Monticello.
Mr. Martin E. Tullis, Adm.
Beds: 48

Continued



Surprise, madam, you're on Candid Camera!

WHITLEY COUNTY

****Memorial Hospital.**
215 E. Van Buren St., Columbia City.
Mr. Carl F. Arntson, Adm.
Beds: 21

****Whitley County Memorial Hospital.**
353 N. Oak St., Columbia City.
Mr. Robert L. McConnell, Adm.
Beds: 73

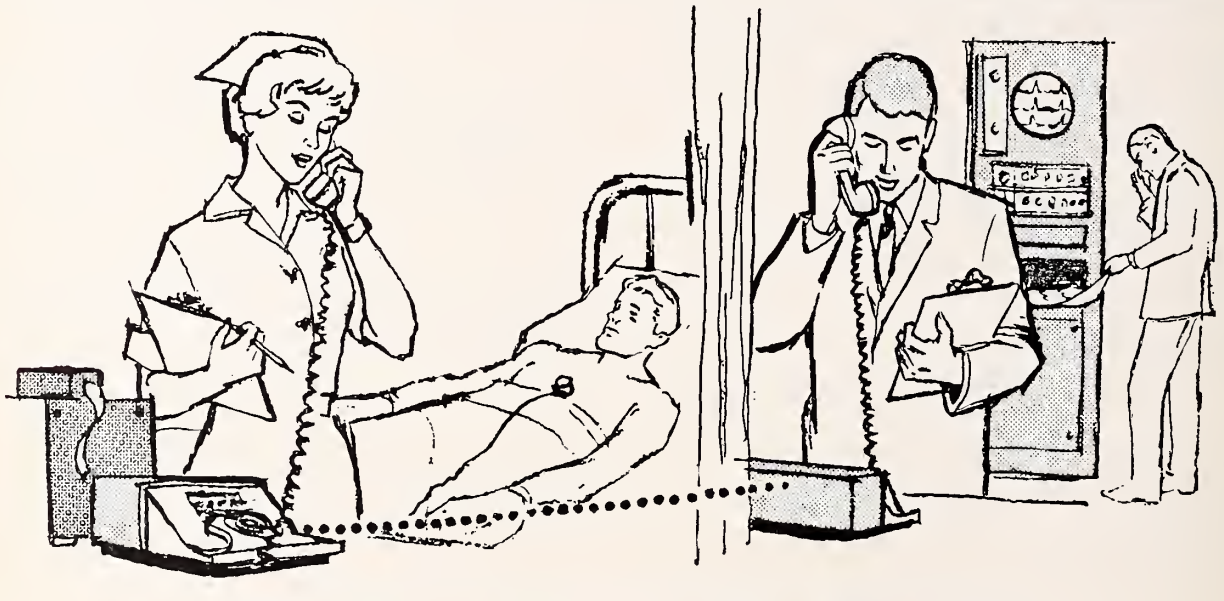
Approved Mental Hospitals in Indiana

See State-Operated Mental Institutions, Page 782.

Clearview Hospital.
Kratzville Road, Evansville.
Mr. William J. Bulger, Adm.
Beds: 40

Wabash Valley Sanitarium.
Lafayette.
Mr. Donald R. Kinzer, Bus. Mgr.
Beds: 44

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Keogh Data Sheet for Doctors

With the following information, please show me what a Keogh plan can mean to me in tax savings:

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NAME_____ M.D. SEX___ DATE OF BIRTH_____

ADDRESS_____ CITY_____ STATE_____ ZIP_____

NET INCOME FROM YOUR PRACTICE $_____ For 1966 $_____ For 1965 $_____ For 1964

DO YOU HAVE AN OWNERSHIP IN ANY UNINCORPORATED TRADE OR BUSINESS?_____

NOTE: If your practice is a partnership, please attach separate information giving the same data as above for each partner.

EMPLOYEES, IF ANY: NAME	SEX	DATE OF BIRTH	DATE EMPLOYED	SALARY	FULL OR PART TIME

27

From *The Journal* 50 Years Ago

We have no absolutely reliable and infallible methods of examination and diagnosis of sinus diseases and I venture the statement that we never shall have. Yet, on the other hand, we have a decided advantage over some of our brothers in other departments of surgery. Aside from the posterior ethmoidal and the sphenoidal sinuses, they are easily explored with no possibility of harm to the patient, if we will only take the time. If we rely too much on subjective symptoms we are going to be at sea, because the temperamental tendencies of the patient may mislead us. The gynecologist may hear the same complaints.

Yankhauer has called attention to a very important point as a diagnostic aid where there are headaches of a suspected sinus origin. Inhalations of steam will shrink the mucosa and enlarge the sinus passage; this and the stimulated ciliary motion will afford better drainage. It is, therefore, found that if a patient suffering from recurrent headaches obtains either partial or temporary relief from inhalations of steam, it can be definitely relied on that the cause of the headache is either in the nose or one of the nasal accessory sinuses.

I am of the opinion that we do not use the long Killian speculum enough. It is so much easier to explore the middle and superior fossa with it. We depend too much on a quick look in and that too without taking the time to deplete the nasal mucosa.—W. A. Hollis, M.D., Hartford City, discussing "The Diagnosis of Maxillary Sinusitis," by Joseph D. Heitger, M.D., Bedford, *JISMA*, June, 1917.

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The AMBAR SCRAPBOOK of Obesity Oddities

FACT & LEGEND

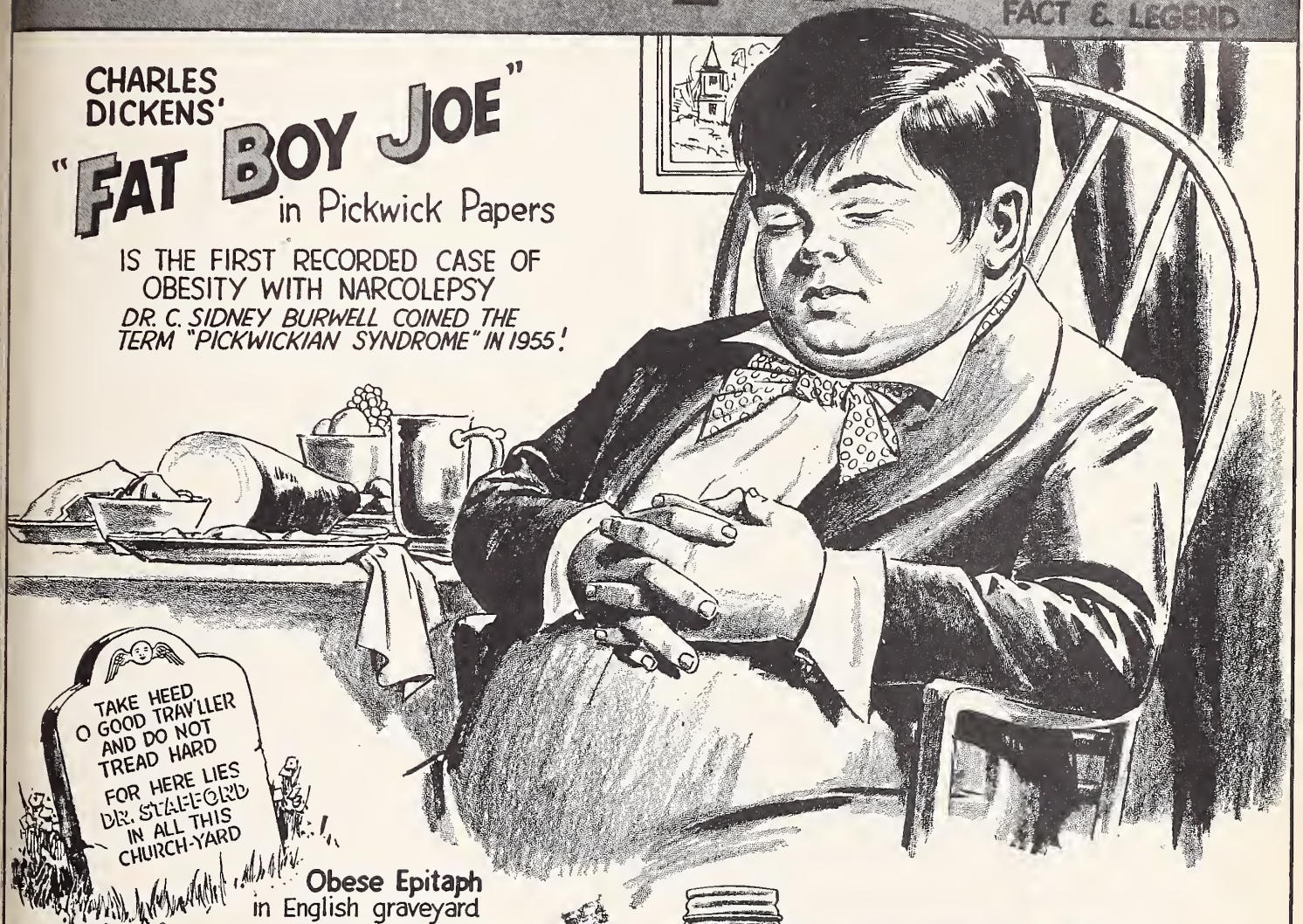
CHARLES DICKENS'

"FAT BOY JOE"

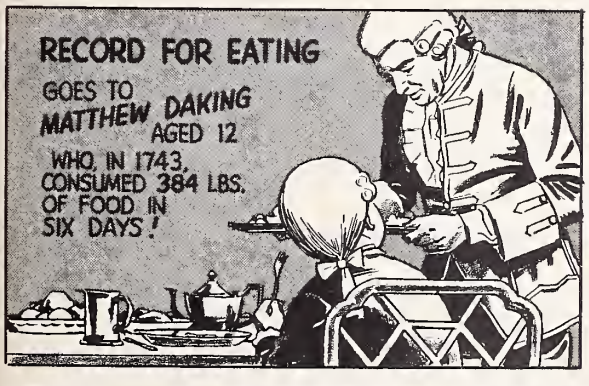
in Pickwick Papers

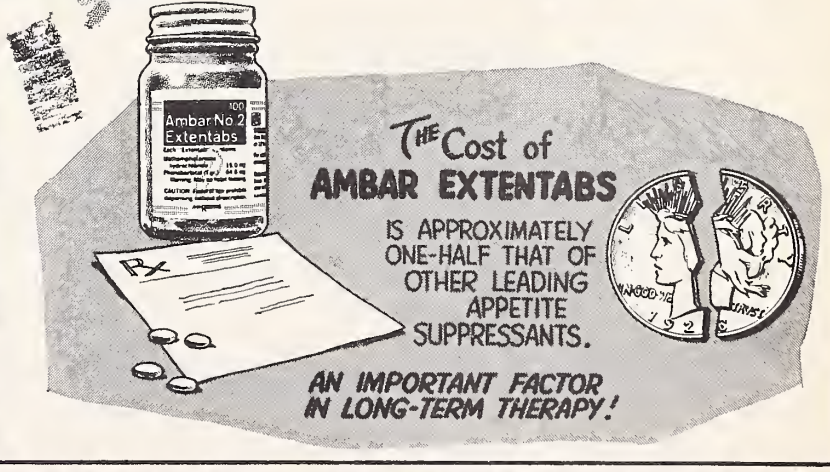
IS THE FIRST RECORDED CASE OF OBESITY WITH NARCOLEPSY

DR. C. SIDNEY BURWELL COINED THE TERM "PICKWICKIAN SYNDROME" IN 1955!



Obese Epitaph in English graveyard





CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

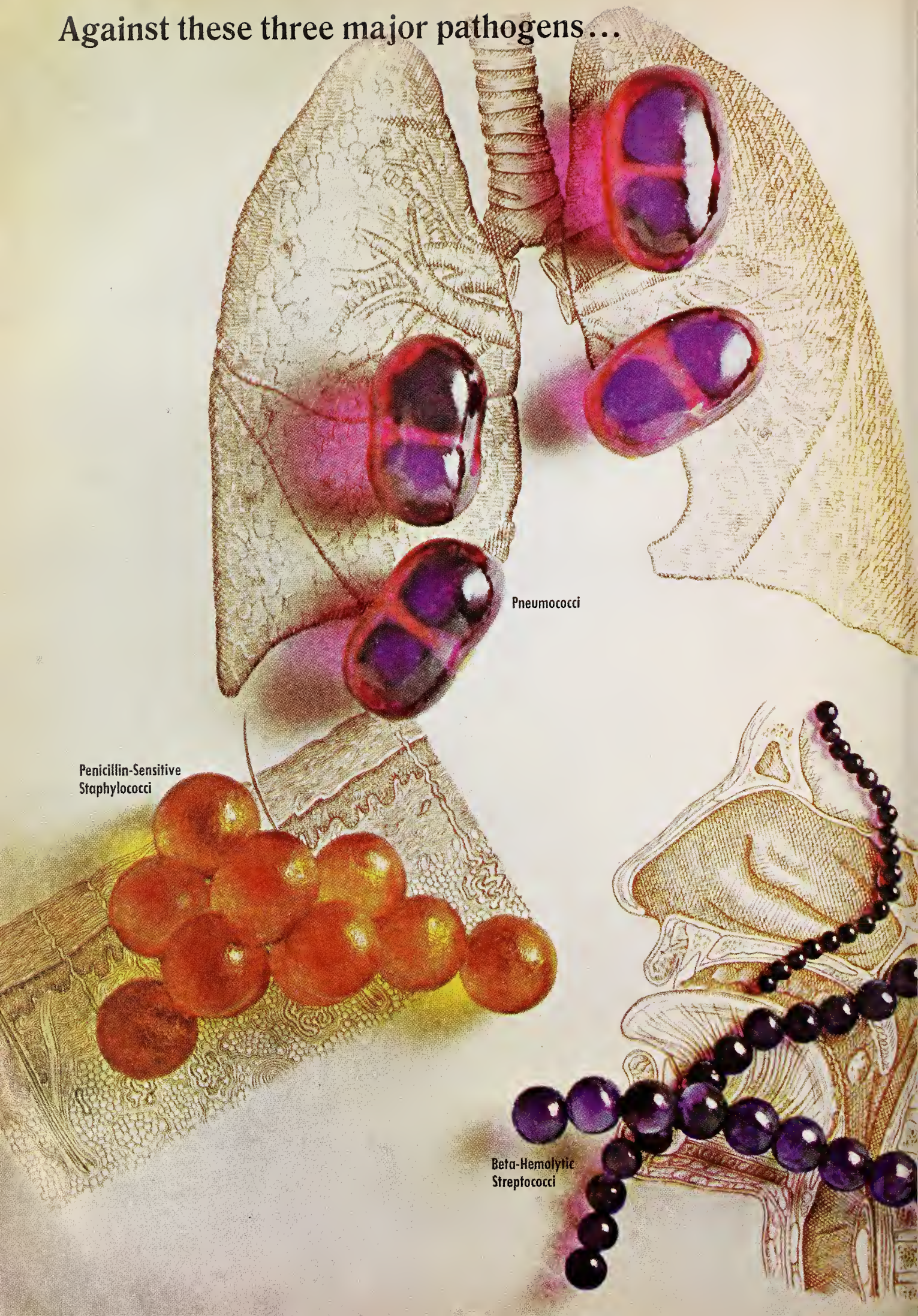
Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220

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Against these three major pathogens...



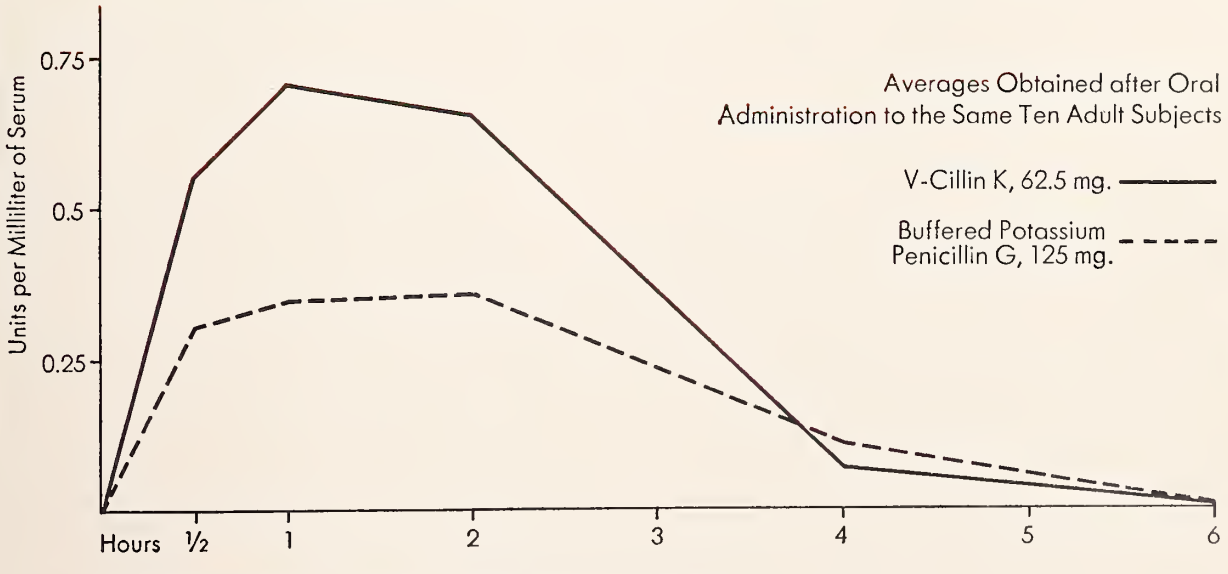
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

V-Cillin K® Lilly 700636

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility ond rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, eoch 5 cc. (approximately one teaspoonful) will contoin 125 mg. (200,000 units) phenoxymethyl penicillin os the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, ond gonococcus infections as well as infections caused by sensitive strains of staphylococci. It moy be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reoction appears more frequently in potients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other ollergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in moles, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Refractory infections generally respond to a second treatment three to four days following completion of the first. Treatment of gonorrhea with severe complications should be individualized, with prolonged and intensive treatment. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, ond 150-cc.-size packages. [032067]

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Lilly

700867

Community Centers for the Mentally Retarded*

ALLEN COUNTY

Johnny Appleseed School and Training Center for Retarded Children
2542 Thompson Ave., Fort Wayne.

BARTHOLOMEW COUNTY

Opportunity Center, Inc.
1015 3rd St., Columbus.

CASS COUNTY

Hendricks Habilitation Center
1418 Woodlawn Ave., Logansport.

Hendricks Training Center
356 W. Broadway, Logansport.

CLARK COUNTY

New Hope School for the Mentally Retarded
P.O. Box 486, Jeffersonville.

CLINTON COUNTY

Clinton County Training Center for Retarded Children
58 S. Columbia St., Frankfort.

DELAWARE COUNTY

The Sheltered Workshop
624 S. Jefferson St., Muncie.

Satryan Day Care Center
2000 W. 7th St., Muncie.

ELKHART COUNTY

"Aux Chandelles"
1000 Hively St., Elkhart.

FLOYD COUNTY

Joseph Rauch Memorial Center for the Retarded
Abbydell and Shrader Aves., New Albany.

GRANT COUNTY

Opportunity Industries
P.O. Box 1174, Marion.

HANCOCK COUNTY

Hancock County Association for Retarded Children, Inc.
Memorial Building, Greenfield.

KOSCIUSKO COUNTY

Cardinal Learning Center
504 N. Bay Dr., Warsaw.

Cardinal Industrial Workshop
504 N. Bay Dr., Warsaw.

LAKE COUNTY

Lake County Association for Retarded Children, Inc.
2702 W. 35th Ave., Gary.

LAPORTE COUNTY

Therapy Center for Retarded Children
3200 Cleveland Ave., Michigan City.

MARION COUNTY

Noble School
615 W. 43rd St., Indianapolis.

MARSHALL-STARKE COUNTIES

Marshall-Starke Development Center, Inc.
R. R. 3, Box 66A, Plymouth.

MONROE COUNTY

Stonebelt Center for Mentally Retarded
1620 Matlock Rd., Bloomington.

PARKE COUNTY

Parke County Children's Memorial Activity Center
602 Howard Ave., Rockville.

PULASKI COUNTY

Pulaski County Habilitation Center
112 W. Main St., Winamac.

ST. JOSEPH COUNTY

Logan School for the Retarded
2228 Colfax Ave., South Bend.

Adult Training Center and Workshop
202 Lincolnway E., Mishawaka.

TIPPECANOE COUNTY

Wabash Center for the Mentally Retarded, Inc.
100 Murphy St., Lafayette.

VANDERBURGH COUNTY

Development Center
2001 Bayard Park Dr., Evansville.

McDonald Hopeland Training Center
2300 Buchanan Rd., Evansville.

WAYNE COUNTY

Wayne County Council for Retarded Children, Inc.
42 S. 9th St., Richmond.

WHITE COUNTY

Council for the Education of Retarded Children, Inc.
570 S. Main St., Monticello. ◄

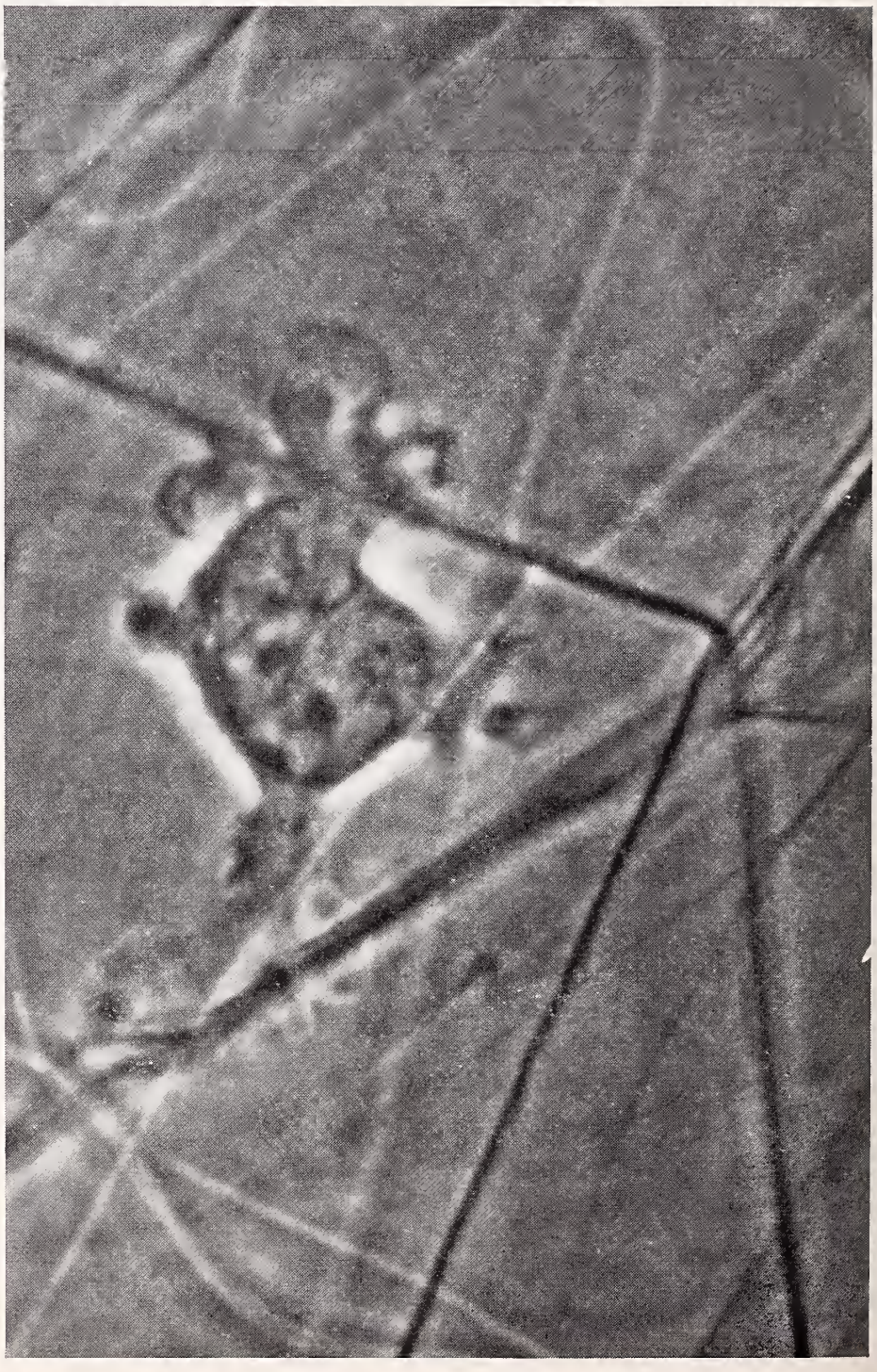
* Compiled by the Indiana Department of Mental Health, Division of Mental Retardation, 1315 W. Tenth St., Indianapolis 46207.

INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

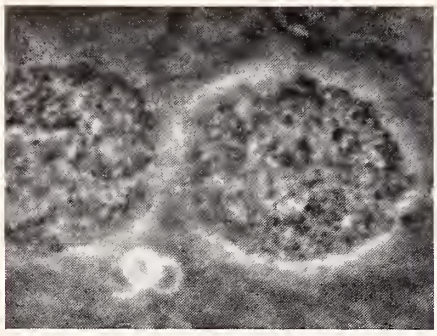


Visual evidence of how corticosteroids influence the inflammatory reaction

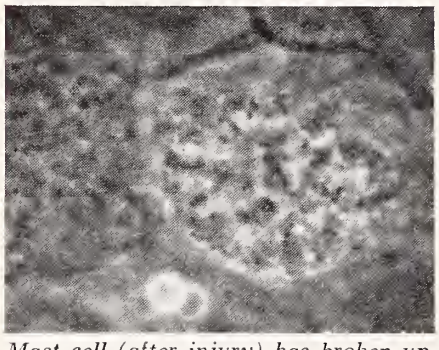
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



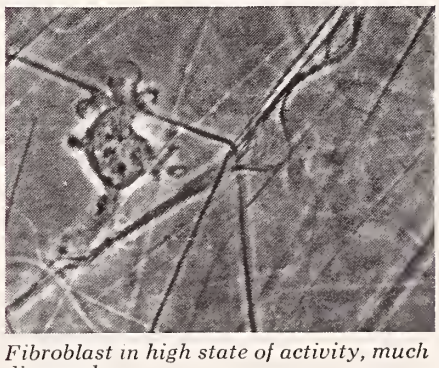
Phase-contrast microscopy showing mast cell before injury.



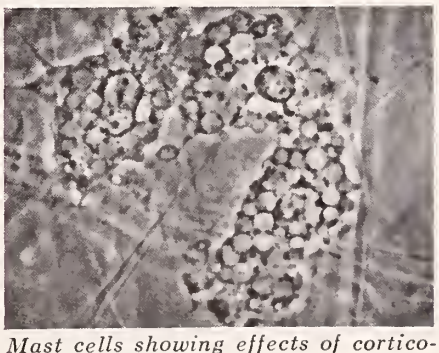
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



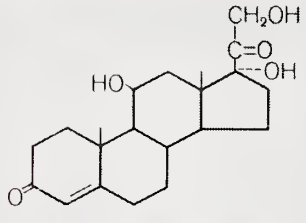
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

*A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

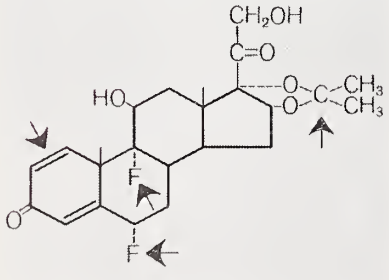
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in refcrence to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

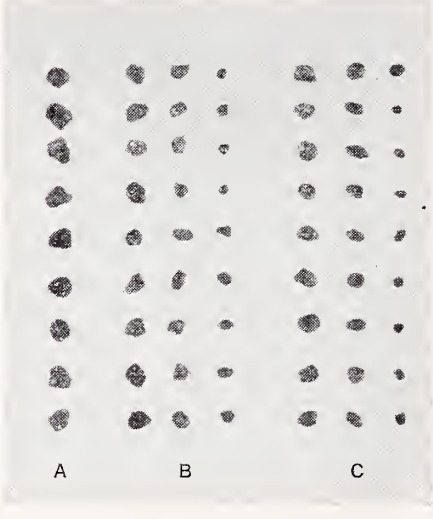


Fluocinolone Acetonide (Synalar)

- *a double bond between carbons 1 and 2*
- *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B —injected with 1, 2 and 4 mg. of hydrocortisone—show progressively smaller thymuses as does Group C—injected with fluocinolone acetonide —but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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For inflammatory dermatoses... by any measure a topical corticosteroid of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

Licensed Nursing Homes In Indiana

May, 1967

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Cooper Rest Home
111 North Third St.,
Decatur 46733
John R. and Janet E. Cooper, R.N., Adms.

ALLEN COUNTY

****Allen County Home**
12101 Lima Rd., R. R. 13,
Ft. Wayne 46808
Thomas A. Katsanis, Adm.

Crow's Haven
2440 Bowser Ave.,
Fort Wayne 46803
Lyle B. Crow, Adm.

Glenacres, Inc.
3420 E. State St.,
Fort Wayne 46805
David M. Markley, Adm.

Hope Manor
611 W. Wayne St.,
Fort Wayne 46802
Charles W. and Ruby J. Setser, Adms.

Lawton Nursing Home, Inc.
1649 Spy Run Ave.,
Fort Wayne 46805
Walter C. Buuck, L.P.N., Adm.

****Lutheran Homes, Inc.**
6701 S. Anthony Blvd., Ft. Wayne 46806
Fred L. Nieno, Adm.

****Parnell Park Nursing Home**
3811 Parnell Ave.,
Ft. Wayne 46805
Paul F. Roembke, Adm.

The Towne House
2209 St. Joe Center Rd., Ft. Wayne 46805
Marvin Isley, Adm.

Twin Maples Sanatarium
734 W. Washington Blvd., Fort Wayne 46804
Laszlo and Elizabeth Szegedy, Adms.

BARTHOLOMEW COUNTY

Bartholomew County Home
2525 Illinois, Columbus 47201
Mildred Drake, Adm.

****Columbus Convalescent Center**
2100 Midway St.,
Columbus 47201
William L. Casady, Adm.

Ken-Joy Convalescent Home
Maple Street, Hope 47246
Arthur L. Miller, Adm.

Luther Nursing Home
837 Fourth St., Columbus 47201
Mary Luther, Adm.

Shady Nook Rest Home
R. R. 8, Columbus 47201
Louanna Niemoeller, Adm.

BENTON COUNTY

Benton County Home
R. R. 1, Oxford 47971
Kenneth Farney, Adm.

Mary's Nursing Home
Maple & Elm, Earl Park 47942
Mary Belange, Adm.

BLACKFORD COUNTY

Blackford County County Home
R. R. 1, Hartford City 47348
Loren Conner, Adm.

Willow Hall
715 N. Mill St.,
Hartford City 47348
Ralph and Martha Waldo, Adms.

BOONE COUNTY

English Nursing Home
1015 N. Lebanon, Lebanon 46052
Bessie May English, Adm.

Indiana Baptist Home, Inc.
R. R. 1, Zionsville 46077
William Keith, Adm.

Maple Lawn Nursing Home
195 N. Maple, Zionsville 46077
Helena B. Davis, Adm.

Oak Park Manor
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Robert E. and Margaret E. Hine, Adms.

National Nursing Home of Lebanon
301 W. Essex, Lebanon 46052
Jessie Parsons, R.N., Adm.

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The Brethren Home, Inc.
R. F. D. 2, Box 97, Flora 46929
William L. Livingston, Adm.

Fix Community Home, Inc.
404 S. Center St., Flora 46929
Charles E. Fix, Adm.

Fix Community Home, Inc., of Delphi
321 E. Monroe, Delphi 46923
Charles E. Fix, Adm.

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Cass County Home
Perrysburg Rd., Logansport 46947
Oliver and Louise Mikesell, Adms.

The Neal Home
2518 George St., Logansport 46947
Mrs. Donald Lutes, Adm.

Rest Haven Home
731 North St., Logansport 46947
Olive S. Jones, L.P.N., Adm.

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203 Sparks Ave., Jeffersonville 47130
Byron W. Branam, Adm.

The Ladies Home, Inc.
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Anna Schimpff, Adm.

O'Brien Rest Home
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Mary A. O'Brien, Adm.

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Continued

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601 S. Leavitt St., Brazil 47834
Helen Stinson, Adm.

Wilson Nursing Home
R. R. 5, Brazil 47834
Jack Wilson and Juanita Mayle, Adms.

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Ashley Nursing & Convalescent Home
R. R. 6, Frankfort 46041
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Assembly Nursing Home
551 E. Walnut St., Frankfort 46041
Rev. George A. Snavely, Adm.

Brock Nursing Home
R. R. 4, Frankfort 46041
Everett and Margaret Brock, Adms.

Clinton County Home
R. R. 2, Frankfort 46041
Russell Williams, Adm.

Mulberry Lutheran Home, Inc.
State Route 38, W. Jackson St., Mulberry 46058
Kincaid Smith, Adm.

Newton Convalescent Home
1201 E. Washington St., Frankfort 46041
Westine Newton, R.N., Adm.

Shoemaker Memorial Home
951 E. Clinton St., Frankfort 46041
Rev. T. Wayne Preusz, Adm.

Wesley Manor, Northwest Indiana Methodist Home, Inc.
1555 N. Main St., Frankfort 46041
Carlyle L. Mason, Adm.

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Colvin Nursing Home
1109 National Highway, Washington 47501
Laura Colvin, Adm.

Meyers Nursing Home
215 W. Oak St., Washington 47501
Rosetta Meyers, Adm.

Roby's Nursing Home
101 Southside Ave., Washington 47501
Thelma D. Roby, Adm.

DEARBORN COUNTY

Dillsboro Manor
Box 66, Dillsboro 47018
Dellas M. Ross, Adm.

Shady Nook Convalescent Home
607 Wilson Creek Rd., Lawrenceburg 47025
Wilbur and Alta McMullen, Adms.

DECATUR COUNTY

Laverne Nursing Home
Westport 47283
Peggy L. V. Waltermire, Adm.

Fultz Nursing Home
303 Jackson St., Greensburg 47240
Arabella Fultz, Adm.

Odd Fellows Home
R. R. 8, Greensburg 47240
William F. Hamilton, Adm.

Paul-Ann Nursing Home
R. R. 4, Greensburg 47240
Paul E. and Ann Johnson, L.P.N., Adms.

Pearl Black Nursing Home
202 W. Third St., Greensburg 47240
Pearl Black, Adm.

DEKALB COUNTY

Barkley Nursing Home
610 S. Broadway, Butler 46721
Audrey E. Barkley, Adm.

Betz Nursing Home
R. R. 3, Auburn 46706
Everett and Doris Betz, Adms.

Butler Hotel Rest Home, Inc.
117 S. Broadway St., Butler 46721
Dorothy Dickerhoof, Adm.

Garrett Convalescent Home
611 S. Peters St., Garrett 46738
Carlson and Mary Platz, Adms.

Sheehy Nursing Homes, Inc.
402 N. Broadway St., Butler 46721
Flo Sheehy, Adm.

Sheehy's Retirement Home
406 N. Broadway, Butler 46721
Flo Sheehy, Adm.

Southview Nursing Home
131 W. Depot St., Butler 46721
Marjorie Harrold, Adm.

DELAWARE COUNTY

Bethel Nursing Home
R. R. 7, Muncie 47302
Emogene E. Turner, Adm.

Chrystal's Country Home
R. R. 1, Selma 47383
Chrystal V. Steele, L.P.N., Adm.

Delaware County Home
R. R. 5, Muncie 47302
Leonard J. Graham, Adm.

Eads Nursing Home
R. R. 7, Muncie 47305
Epsy W. Eads, Adm.

Faulkner Rest Home
905 S. Grant St., Muncie 47305
Edgar Faulkner, Adm.

Frazee Convalescent Home
R. R. 2, Dunkirk 47336
Leatha Frazee, Adm.

Golden Rule Nursing Home
502 N. Madison St., Gaston 47342
Eunice A. Messersmith, L.P.N., Adm.

Maple Grove Convalescent Home
1347 East Jackson St., Muncie 47305
Pearl B. Harty, Adm.

Morgan-Nickols Convalescent Home
727 Wheeling Ave., Muncie 47303
Margaret L. Nickols, Adm.

Morgan-Nickols Residential Club
175 Kilgore, Muncie 47305
Margaret L. Nickols, Adm.

****Parkview Nursing Home**
2200 White River Blvd., Muncie 47303
Margaret L. Nickols, Adm.

****Riverview Convalescent Home**
R. R. 2, Burlington Dr., Muncie 47302
Nila M. Harty, Adm.

Shady Haven Rest Home
R. R. 6, Bethel Pike, Muncie 47302
Leila C. Wilcox, Adm.

Sylvester Home for the Aged
R. R. 5, Burlington Dr., Muncie 47302
Mantha J. Sylvester, Adm.

Woodland Home #1
917 E. Main St., Muncie 47305
Hazel Wilson, R.N., Adm.

Woodland Home #2
1612 W. Jackson, Muncie 47303
Hazel Wilson, R.N., Adm.

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Hubster's Boarding Home
1008 Van Buren, Huntingburg 47542
Lillian Hubster, Adm.

Jasper Nursing Home
102 W. Seventh St., Jasper 47546
Lola M. Wehrle, Adm.

Providence Home
W. Ninth Street, Jasper 47546
Rev. Philip Ottavi, Adm.

****St. Ann Nursing Home**
511 Fourth St., Huntingburg 47542
Sister M. Johnita, Adm.

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Fair-Moor Nursing and Convalescent Home, Inc.
2600 Moorehouse, Elkhart 46517
Robert W. McElwain, Adm.

Gay Peterson Nursing Home
302 E. Lincoln Ave., Goshen 46526
Iva Gay Peterson, Adm.

Hutchinson Nursing Home
302 S. Sixth St., Goshen 46526
Emil and Louise Weisjahn, Adms.

Lu-Ann Nursing Home
952 W. Walnut St., Nappanee 46550
John L. Mellinger and Wayne R. Dunham, Adms.

Milleman Convalescent Home, Inc.
430 W. Marion St., Elkhart 46514
Herold A. and Hazel Milleman, L.P.N., Adms.

Nicholson Convalescent Home
2400 Elkhart Rd., Goshen 46526
George and Gracia Nicholson, R.N., Adms.

Rest Haven Nursing Home
803 Wolf Ave., Elkhart 46514
Peter A. Calabrese, Adm.

Rest Home
525 W. Lexington Ave., Elkhart 46514
Pearl Carr, Adm.

Riley Convalescent Home
527 S. Main St., Goshen 46526
Albert and Eunice Riley, L.P.N., Adms.

Thorp Nursing Home
621 E. Vistula St., Bristol 46507
Ruth G. Thorp, Adm.

Treva's Nursing Home
1005 S. Third St., Elkhart 46514
Treva M. Criss, Adm.

FAYETTE COUNTY

Lincoln Manor Nursing Home
903 Lincoln Ave., Connersville 47331
Chester C. O'Neal, Adm.

Paula-Mar Nursing Home
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Paul E. and Mary M. Harvey, Adms.

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703 E. Spring St., New Albany 47150
Sister Catherine Loretta, Adm.

FOUNTAIN COUNTY

Alward Nursing Home
605 Summit St., Attica 47918
Leston and Imogene B. Alward, R.N., Adms.

Rudisill Nursing & Convalescent Home
303 Second St., Covington 47932
Susie M. Goff, Adm.

FRANKLIN COUNTY

Echo Hill Nursing Home
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Myrtle Jackson, Adm.

Elsie Dreyer Nursing Home
273 Main St., Brookville 47012
Elsie Dreyer, Adm.

FULTON COUNTY

Miller Nursing Home
719 Madison St., Rochester 46975
Helen Miller, Adm.

Rochester Nursing Home
1118 Main St., Rochester 46975
Gerald L. Eastburg, Adm.

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Duncan Wee Bonnie Rest Home
R. R. 1, Princeton 47570
Semira D. Fishman, Adm.

Gibson County Home
R. R. 1, Princeton 47570
William Morgan, Adm.

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210 N. Gibson St., Oakland City 47560
Hovey Hedges, Adm.

Holiday Homes, Inc.
Tower Heights, Princeton 47570
Lowell A. Dunigan, Adm.

Hottel Nursing Home
East Main St., Francisco 47534
Lillian A. Hottel, Adm.

Oakland City Rest Home
114 Grove St., Oakland City 47560
Sylvia Burnett, Adm.

GRANT COUNTY

Calbert's Rest Home
204 N. Washington St., Marion 46952
Geneva Rosenburg, Adm.

Ellen Hill Home, Inc.
710 W. Third St., Marion 46952
Opal E. Calbert, Adm.

Emily E. Flinn Home, Inc.
615 W. 12th St., Marion 46952
Rev. James M. Hull, Adm.

Friendly Home of the Convalescent, Inc.
Post Office, Fowlerton 46930
Ralph C. DeGolyer, Adm.

Friendship Heights Rest Home
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Addie M. Bryant, L.P.N., Adm.

Golden Age Nursing Home
1800 Kem Rd., Marion 46952
Bernie Winkle, Adm.

****Jones Convalescent Home, Inc.**
518 W. 36th St., Marion 46952
Carroll M. Jones, Adm.

River-View Nursing Home, Inc.
221 N. Washington, Marion 46952
Ronald Brown, Adm.

GREENE COUNTY

Glenburn Rest Haven
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Nola D. Yoder, Adm.

HAMILTON COUNTY

Arcadia Rest Home
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Florence Sigler, Adm.

Beulah Herbert Boarding Home for Children
Route 1, Cicero 46034
Beulah Herbert, Adm.

Hamilton Rest Home
15755 Allisonville Rd., Noblesville 46060
Mary McKinley, Adm.

Lakeview Guest Home
R. R. 1, Box 15, Carmel 46032
Seth and Sara Wells, Adms.

Maple Park Health Manor
Box 156-C, R. R. 1, Westfield 46074
Carl Tracy, Adm.

Continued

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Continued

Rollins Home for Retarded Children
69 N. Harrison St., Cicero 46034
Mabel A. Rollins, R.N., Adm.

Sheridan Rest Home, Inc.
903 Sheridan Ave., Sheridan 46069
Dorothy Rood, Adm.

HANCOCK COUNTY

Golden Rule Rest Home
R. R. 12, Box 403, Indianapolis 46236
Emily P. Beck, L.P.N., Adm.

Model A Nursing Home
R. R. 5, Greenfield 46140
Jesse and Lavon Beeson, Adms.

Pleasant Acres
R. R. 12, Box 320, Indianapolis 46236
Frederick M. and Lorna Burns, L.P.N., Adms.

****Twinbrook, Inc.**
R. R. 4, Box 66, Greenfield 46140
Marie C. Kavalaris, Adm.

Wood Nursing Home
14 N. Wood St., Greenfield 46140
Hazel E. Wood, L.P.N., Adm.

HENDRICKS COUNTY

Hendricks County Home
865 E. Main, Danville 46122
Edna O. Anderson, Adm.

Vinewood Nursing Home
404 North Vine St., Plainfield 46168
Stephen Snyder, Adm.

HENRY COUNTY

Hammond Nursing Home
806 W. Broad St., New Castle 47362
Florence Molchin, Adm.

Henry County Home
N. Memorial Dr., New Castle 47362
Fred Glad, Adm.

Lewisville Hotel for Senior Citizens
U. S. 40, Lewisville 47352
Sarah Jones, Adm.

Middletown Nursing Home
130 S. 10th St., Middletown 47356
Robert I. Clevenger, Adm.

New Hope Nursing Home
Lewisville 47352
Charlotte Baird, Adm.

Resthaven
420 S. Main St., New Castle 47362
Dorothy Shipp, R.N., Adm.

Ryse Boarding Home
R. R. 5, New Castle 47362
John T. and Arizonia Ryse, Adms.

HOWARD COUNTY

Harrell's Boarding House
708 N. Main St., Kokomo 46901
June Harrell, Adm.

Hillcrest Nursing Home
1210 E. Jefferson St., Kokomo 46901
Marie Seiberling, Adm.

Lucy Cole Nursing Home
332 W. Markland, Kokomo 46901
Lucy Cole, L.P.N., Adm.

Pleasant Rest
508 W. Taylor St., Kokomo 46901
Homer E. and Frances T. Johnson, Adms.

Samaritan Home of Kokomo, Inc.
513 East Vaile Ave., Kokomo 46901
Sister Raphael, Adm.

Windsor Estates of Kokomo
429 Lincoln Rd. W., Kokomo 46901
Virginia Courtney, R.N., Adm.

HUNTINGTON COUNTY

Huntington County Home
R. R. 5, Huntington 46750
Ben Thompson, Adm.

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Warren 46792
Dr. Dewey C. Souder, Adm.

Roanoke Nursing Home, Inc.
743 N. Main Street, Roanoke 46783
Robert Barna, Adm.

Town & County Nursing Home
R. R. 8, Huntington 46750
Donald E. and Marlene Barna, R.N., Adms.

JACKSON COUNTY

Jackson Park Convalescent Center, Inc.
707 Jackson Park Dr., Seymour 47274
Harold Chandler, Adm.

Kaley's Nursing Home
202 W. Sixth St., Seymour 47274
Marcia Kaley, Adm.

Westside Nursing Home
108 S. Pine St., Seymour 47274
Norma Suggs, Adm.

JASPER COUNTY

Jasper County Home
R. R. 3, Rensselaer 47978
Fred Hall, Adm.

Remington Rest Home
Illinois and Minnesota Sts., Remington 47977
Birdella N. Sullivan, Adm.

JAY COUNTY

Portland Nursing Home
406 W. Arch St., Portland 47371
Mary Ellen Hearn, Adm.

JEFFERSON COUNTY

****Hanover Nursing Home**
S. R. 56 W., Hanover 47243
Ella L. Shuell, R.N., Adm.

Mayfield's Retirement and Rest Home
618 E. Second St., Madison 47250
George and Charlotte Mayfield, Adms.

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Johnson's Convalescent Home
113 E. Jackson, North Vernon 47265
Gladys Johnson, Adm.

Ritz Nursing Home
Box 42, Scipio 47273
Nona Ritz, Adm.

JOHNSON COUNTY

Faith Home
P. O. Box 218, Edinburg 46124
Raymond C. Brown, Adm.

Greenwood Hilltop Nursing Home
R. R. 2, Fry Rd., Greenwood 46142
Violet VanSickle, Adm.

Indiana Masonic Home
Franklin 46131
Roy O. Turner, Adm.

****Indiana Retired Teacher's Community**
Greenwood Village, Greenwood 46142
Mary Jane Beaman, Adm.

Janie's Nursing Home
651 S. State St., Franklin 46131
Janie Johnson, L.P.N., Adm.

Johnson County Home
R. R. 1-B, Franklin 46131
Albert Bundy, Adm.

Methodist Home
Franklin 46131
Rev. W. D. Koehnlein, Adm.

Mickie's Nursing Home
750 W. Madison, Franklin 46131
Mildred Harris, Adm.

The Welcome Nursing Home
1109 N. Main St., Franklin 46131
Stephen J. Snyder, Adm.

KNOX COUNTY

Crestview Home
Box 237, Old Bruceville Rd., Vincennes 47591
Cora T. Joyce, Adm.

Freelandville Community Home, Inc.
Freelandville 47535
Lorena Walters, R.N., Adm.

Moore's Nursing Home, Inc.
204 W. Third St., Bicknell 47512
Ernest P. and Barbara J. Moore, Adms.

****Restwell Home, Inc.**
1321 Willow St., Vincennes 47591
Warren J. Mauck, Adm.

****Vincennes Nursing Home**
1202 S. 16th St., Vincennes 47591
Fern Junod, Adm.

KOSCIUSKO COUNTY

****Alfran Nursing Home**
2501 E. Center St., Warsaw 46580
Frank N. and Alice Wilson, R.N., Adms.

****Miller's Merry Manor**
R. R. 2, County Farm Rd., Warsaw 46580
Wallace T. and Enid L. Miller, R.N., Adms.

Orn Nursing Home
North Main St., Milford 46542
Mrs. Amos Orn, Adm.

Pierceton Nursing Home
Indiana and Main Sts., Pierceton 46562
Elson Wilson, Adm.

****Prairie View Rest Home, Inc.**
300 Prairie St., Warsaw 46580
Hazel Bradbury, L.P.N., Adm.

LAGRANGE COUNTY

Marks' Nursing Home
R. R. 1, LaGrange 46761
Marie B. Marks, Adm.

LAKE COUNTY

Colonial House, Inc.
119 N. Indiana Ave., Crown Point 46307
Edythe Frantz, L.P.N., Adm.

Gary Convalescent Home, Inc.
386 Mount St., Gary 46406
Joseph Shapiro, M.D., Adm.

Great Oaks Nursing and Convalescent Home
R. R. 1, Box 30, Cedar Lake 46303
Richard T. Davis, Adm.

Green's Geriatric Health Center
2052 Delaware St., Gary 46407
Benjamin J. Green, Adm.

Green's Home
3960 Massachusetts St., Gary 46409
Leonard D. and Lena J. Odum, Adms.

Jayne Bryant Nursing Home
P. O. Box 166, Crown Point 46307
Ellen Jayne Bryant, Adm.

****Lake County Convalescent Home**
114 County Road O, Crown Point 46307
Joseph J. Kish, Adm.

Miller Nursing Home
2301 Adams St., Gary 46407
Ida Miller, Adm.

****Mills Rest Home**
5011 Maryland St., Gary 46409
Audrey Mills, Adm.

St. Anthony's Rest Home
201 Franciscan Rd., Crown Point 46307
Sister Mary Cherubim, Adm.

Shady Heights Nursing Home
R. R. 1, Box 46, Dyer 46311
Faye McGuire, L.P.N., Adm.

Simmons Loving Care Health Facility
1944 Maryland St., Gary 46407
Anna L. Simmons, Adm.

West End Nursing Home
1501 Wheeler St., Gary 46406
Henderson D. Hall, Adm.

West Side Nursing Home
829 W. Third Ave., Gary 46402
Stuart Primack, Adm.

Wildwood Manor, Inc.
1964 Clark Rd., Gary 46404
George Walker, Adm.

Willowdale Convalescent Home
10406 Jennings Pl., Crown Point 46307
Donald D. DuSold, M.D., Adm.

Woodmar Nursing Home
6727 Baring Ave., Hammond 46324
Geraldine Wiseley, Adm.

LAPORTE COUNTY

Anderson Sanitarium, Inc.
1702 I St., LaPorte 46350
Lula I. Perkins, Adm.

Beach Cliff Lodge Nursing Home
1001 Lake Shore Dr., Michigan City 46361
Theodore Moss, Adm.

Hampton Nursing Home
Michigan and Wolfe Ave., Michigan City 46361
Charlie and Mary Hampton, Adms.

****Lakeside Convalescent-Nursing Home, Inc.**
One mile east of U.S. 421 on U.S. 20, Michigan City 46361
Norman Rust, Adm.

Private Care Home
602 Spring St., Michigan City 46360
Roger J. Schofield, Adm.

Stites Nursing and Convalescent Home
R. R. 5, Box 386-C, LaPorte 46350
Eleanor Bull, Adm.

Waterford Nursing Home
R. R. 3, Box 319, Michigan City 46361
Mary Ellen Poffenberger, Adm.

LAWRENCE COUNTY

Blackburn Rest Home
519 H St., Bedford 47421
Stella J. Blackburn, Adm.

Cobb's Nursing Home
602 J St., Bedford 47421
Doyle and Adele Cobb, Adms.

Oolitic Rest Home
N. Lafayette St., Oolitic 47451
Edna Perry, Adm.

Continued

NURSING HOMES

Continued

Parkview Nursing Home
2111 Norton Lane, Bedford 47421
Irma C. Hendricks, L.P.N., Adm.

Sunny Acres Rest Home
R. R. 5, Bedford 47421
Mabel Ray, L.P.N., Adm.

Vice Room and Board Home
304 W. Main St., Mitchell 47446
Zora Vice Cooper, Adm.

MADISON COUNTY

****Americana Nursing Center of Anderson**
1345 N. Madison Ave., Anderson 46011
Robert Hale, Adm.

Bradford Nursing Home
625 W. Adams St., Alexandria 46001
Alma Bradford, Adm.

Bright Memorial Nursing Home
2006 Jackson St., Anderson 46016
Evelyn E. Teter, Adm.

Cook Rest Home
424 Ruddle Ave., Anderson 46012
Ella Cook, Adm.

Cozy Corner Nursing Home
706 Vasbinder, Chesterfield 46017
Alice M. Schiewe, Adm.

Dickey Nursing Home
220 N. Ninth Street, Elwood 46036
Louise Dickey, L.P.N., Adm.

Dickey Nursing Home, Inc.
1007 N. 9th, Elwood 46036
James G. Dickey, Adm.

Goble Home
332 W. 11th St., Anderson 46016
Oran and Olive Goble, Adms.

Miramar Nursing Home
1901 N. "A" St., Elwood 46036
James G. Dickey, Adm.

New Haven Nursing Home
1023 E. Eighth St., Anderson 46012
Josephine Wade, L.P.N., Adm.

Rahbek Nursing Home
711 W. Fifth St., Anderson 46016
Mary Ellen Bell, Adm.

Westside Nursing Home
416 W. 12th St., Anderson 46016
Marian Webb, L.P.N., Adm.

MARION COUNTY

Ada's Golden Age
2115 Central Ave., Indianapolis 46202
Ada Stockdale, Adm.

Alpha Home for Aged
1840 Senate Ave., Indianapolis 46202
Maude Gaillard, Adm.

Altenheim of Indianapolis
2007 N. Capitol Ave., Indianapolis 46202
Alice Pearcy, Adm.

****Americana Nursing Center Of Indianapolis**
5600 E. 16th St., Indianapolis 46218
Alice Blake, R.N., Adm.

Anthony Hall Nursing Home
2135 N. Alabama St., Indianapolis 46204
Stephen J. Snyder, Adm.

Arlington Manor Rest Home
401 E. Washington St., Indianapolis 46204
Robert L. Hassfurder, Adm.

The Barton House
505 N. Delaware, Indianapolis 46204
Stephen J. Snyder, Adm.

Bel-Terrace Nursing Home
1629-33 N. College Ave., Indianapolis 46202
Stephen J. Snyder, Adm.

Booker-Watts Annex Nursing Home
1445 Broadway, Indianapolis 46202
Geneva Watts, Adm.

Booker-Watts Nursing Home
2523 Central, Indianapolis 46205
Geneva Watts, Adm.

****Borinstein Home for Jewish Aged, Inc.**
3516 Central Ave., Indianapolis 46205
Bill Newman, Adm.

Chateau de Repos, Inc.
5025 W. 52nd St., Indianapolis 46223
Doris E. Stuart, L.P.N., Adm.

****Colonial Crest, Inc.**
7149 E. 21st St., Indianapolis 46219
Hart N. Hasten, Adm.

Community "Emerson" Nursing Home, Inc.
3420 N. Emerson Ave., Indianapolis 46218
John G. Harris, Adm.

Community Nursing Home
4743 Southeastern, Indianapolis 46203
John G. Harris, Adm.

Community South Meridian Nursing Home
2102 S. Meridian St., Indianapolis 46225
John G. Harris, Adm.

Community West 38th St. Nursing Home
5435 W. 38th St., Indianapolis 46224
John Harris, Adm.

Conner Nursing Home
1408 N. Pennsylvania St., Indianapolis 46202
Lucy V. Conner, Adm.

Crestview Manor Nursing Home
1118 East 46th St., Indianapolis 46205
John G. Harris, Adm.

Dumas Nursing Home
2712 N. Illinois, Indianapolis 46208
Mary Lou Dumas, R.N., Adm.

Evangelistic Center, Inc.
3518 Shelby, Indianapolis 46227
Rev. E. P. Qualls, Adm.

Frame Nursing Home
373 N. Holmes Ave., Indianapolis 46222
Bert and Marybell Frame, Adms.

Garfield Park Nursing Home
2605 Shelby Street, Indianapolis 46203
Thelma Bryant, L.P.N., Adm.

Garner's Nursing Home
1429 Carrollton Ave., Indianapolis 46202
Elizabeth Garner, Adm.

****Greenview Manor Nursing Home**
1700 N. Illinois St., Indianapolis 46202
Sue Warner, R.N., Adm.

Harris Sanatorium, Inc.
2424 E. 46th St., Indianapolis 46205
Jill Johnston, R.N., Adm.

Heritage Nursing Home
8935 E. 46th St., Indianapolis 46226
Mary Jane Nicewander, R.N., Adm.

Hillside Nursing Home
3405 N. Ralston, Indianapolis 46218
Bennie Mason, Adm.

Huff's Sanitarium
115 S. Audubon Rd., Indianapolis 46219
Bettina Sullivan, Adm.

Independent Living Boarding Home
6038 W. 25th St., Indianapolis 46224
Robert Roland, Adm.

Indianapolis Home for the Aged, Inc.
1731 N. Capitol Ave., Indianapolis 46202
Orena Royce, Adm.

Lynhurst Nursing Home, Inc.
5225 W. Morris St., Indianapolis 46241
James E. Hill, Sr., and Ethel L. M. Eldridge, Adms.

Mabel S. Waddle Private Nursing Home
2112 N. Delaware, Indianapolis 46202
Stephen J. Snyder, Adm.

****Marion County Home**
R. R. 10, Box 333, Indianapolis 46239
Robert F. Oldham, Adm.

Mayfair Home
3240-42 Washington Blvd., Indianapolis 46205
Mr. and Mrs. John Leech, Adms.

Memorial Nursing Home, Inc.
41 W. 32nd St., Indianapolis 46208
Kathleen G. Kelly, R.N., Adm.

Midland House, Inc.
3302 Washington Blvd., Indianapolis 46205
Rollyn E. Mayor, Adm.

Northside Nursing Home
2037 N. Illinois St., Indianapolis 46202
Susie M. Goff, Adm.

****Northwest Manor Nursing Home**
6440 West 34th St., Indianapolis 46224
Emory Vollmer, Adm.

Pleasant View Rest Home
5000 Southeastern Ave., Indianapolis 46203
C. O. Rader, Adm.

St. Paul Baptist Church Home for the Aged
1141-45 N. Sheffield Ave., Indianapolis 46222
Rev. C. J. Dailey, Adm.

St. Paul Hermitage
501 N. 17th St., Beech Grove 46107
Sister M. Gilberta, O.S.B., Adm.

Sarah's Nursing Home
2716 Sutherland Ave., Indianapolis 46205
Sarah Hill, Adm.

Springer Health Facility
6566 W. Washington St., Indianapolis 46241
Robert and Leona Kenworthy, Adms.

T. Wray Nursing Home
1812 Central, Indianapolis 46202
Thelma F. Wray, L.P.N., Adm.

Three Sisters Nursing Home
124 W. 26th St., Indianapolis 46208
Esther, Etta and Horty Springfield, Adms.

****Turtle Creek Convalescent Center**
525 E. Thompson Rd., Indianapolis 46227
Milton E. Collins, Ph.D., Adm.

Ward Nursing Home
1518 N. Senate Ave., Indianapolis 46202
Willa Mae Murray, Adm.

Weber Convalescent Home
43 S. Ritter Ave., Indianapolis 46219
C. O. Rader, Adm.

Welch Boarding Home
2901 N. Pennsylvania St., Indianapolis 46205
Catherine Welch, Adm.

Wert Nursing Home
1716-18 N. New Jersey, Indianapolis 46202
Edith M. Wert, Adm.

Wooldridge Nursing Home
624 E. 12th St., Indianapolis 46202
Albert H. and Patricia A. Wooldridge, Adms.

MARSHALL COUNTY

Fairview Nursing Home
Route 4, Plymouth 46563
Mabel Beam, Adm.

I.B.M. Nursing Home
1029 W. Jefferson St., Plymouth 46563
Iva B. Miller, Adm.

Klapp Nursing Home
145 S. Michigan, Argos 46501
Doris I. Klapp, Adm.

Marshall County Home
R. R. 5, Plymouth 46563
Warren Locker, Adm.

Myers Nursing Home
R. R. 3, Box 159, Bremen 46506
Pearl Myers, L.P.N., Adm.

R.N. Nursing Home
Teegarden 46569
Laura M. Hathaway, R.N., Adm.

MIAMI COUNTY

Armstrong's Park View Rest Home
402 Armstrong Ave., Peru 46970
Zella C. Armstrong, L.P.N., Adm.

Church of the Brethren Home, Inc.
Mexico 46958
Orville Sherman, Adm.

****Friendly Nursing Home, Inc.**
317 Blair Pike, Peru 46970
Jean Leakey, Adm.

Miami County Home
R. R. 5, Peru 46970
Rev. Arthur J. Tinkel, Adm.

The Miami Home
77 E. Third St., Peru 46970
H. Lucille McDaniel, Adm.

Peru Senior Citizens Home
906 W. Main St., Peru 46970
Margaret Harris, L.P.N., Adm.

MONROE COUNTY

Arbutus Rest Home
R. R. 2, Box 46, Bloomington 47403
Richard Schultheis, M.D., and Dale Chamness, Adms.

****Hospitality House, Inc.**
1100 S. Curry Pike, Bloomington 47401
C. Darrell Phillips, Adm.

MONTGOMERY COUNTY

Ben Hur Home
1375 S. Grant, Crawfordsville 47933
Martha E. Williams, Adm.

Friendship House
209 Main St., Ladoga 47954
Lillie M. Miller, Adm.

Hazel Small Rest Home
N. Vine St., Waynetown 47990
Sarah Small, Adm.

Laura M. Bowles Convalescent Home, Inc.
1304 S. Grant Ave., Crawfordsville 47933
Richard Bowles, L.P.N., Adm.

Mapleview Home
1308 E. Main, Crawfordsville 47933
Evelyn Connelly and Helen Alsop, Adms.

Continued

NURSING HOMES
Continued

Westbrook Nursing Home
R. R. 9, Box 39, Crawfordsville 47933
Mary E. Brooks, Adm.

MORGAN COUNTY

Cherry Nursing Home
60 E. Harrison St., Martinsville 46151
Zepha Cherry, Adm.

Henderson Nursing Home
214 Washington St., Morgantown 46160
Joe and Marguerite Henderson, Adms.

Kennedy Memorial Christian Home
210 W. Pike St., Martinsville 46151
W. Dean Mason, Adm.

Morgan County Home
190 S. Main St., Martinsville 46151
Earl B. Fletcher, Adm.

NEWTON COUNTY

Kentland Kare Home
102 E. Carroll St., Kentland 47591
Helen M. Borman, R.N., Adm.

NOBLE COUNTY

Kish's Twin Pines Nursing Home
Rt. 1, Albion 46701
Fred and Betty Kish, Adms.

Kneipp Springs
Rome City 46784
Sister Mary Marcella, Adm.

Luckey Memorial Nursing Home
Highways #33 & #109, Wolflake 46796
Bessie K. Luckey, Adm.

Lutheran Homes, Inc.
612 E. Mitchell, Kendallville 46755
Fred L. Nieno, Adm.

Sacred Heart Home
R. R. 2, Avilla 46710
Sister M. Dolorita, R.N., Adm.

Saint Vincent Home for the Aging
R. R. 1, Ligonier 46767
Sister M. Agatha, R.N., Adm.

OHIO COUNTY

Rising Sun Nursing Home
Rio Vista Ave., Rising Sun 47040
Margaret Granatir, R.N., Adm.

ORANGE COUNTY

Gorge Nursing Home, Inc.
R. R. 2, French Lick 47432
Gertrude Haynes, R.N., Adm.

OWEN COUNTY

Donna Nursing Home #2
R. R. 2, Spencer 47460
Norman S. Tirsway, Adm.

Gosport Nursing Home
W. Main St., Gosport 47433
Mary F. Wampler, Adm.

Owen County Home
R. R. 3, Spencer 47460
Ruthie Gray, Adm.

PARKE COUNTY

Bishop's Nursing Home
South Main St., Box 58
Bloomingdale 47832
Darrell H. Bishop, Adm.

Parke County Nursing Home
R. R. #2, Rockville 47872
Margaret Ball, Adm.

Wabash Valley Nursing Home
934 N. Jefferson St.,
Montezuma 47862
Darvin and Wilma Busenbark, Adms.

PERRY COUNTY

Lincoln Hills Nursing Home, Inc.
19th and Pestalozzi, Tell City 47586
C. Bayless Conley, Adm.

PORTER COUNTY

Beverly Shores Nursing Home, Inc.
Beverly Shores 46301
John W. Bragg, Adm.

****Evergreen Park Nursing and Convalescent Home**
State Rd. 49 and LaPorte,
Valparaiso 46383
John Blenke, Adm.

Whispering Pines Home for Senior Citizens
N. Calumet Rd., Valparaiso 46383
Mary E. Bartz, Adm.

POSEY COUNTY

Allison Nursing Home
Locust St., Poseyville 47633
Lula Allison, Adm.

The Charles Ford Memorial Home
New Harmony 47631
Harry S. Glump, Adm.

Merimac Nursing Home
1302 North St., Cynthiana 47612
Mary M. McGuire, Adm.

Mount Vernon Nursing Home
831 Mulberry St., Mount Vernon 47620
Rena Green, Adm.

Posey County Home
Poor Infirmary Rd., R. R. 4, Mt. Vernon 47620
Edith Hester, Adm.

The Valley Rest Home
R. R. 4, Mount Vernon 47620
Raymond E. and Esther M. Faulkner, Adms.

PUTNAM COUNTY

Donna Nursing Home
Main St., Cloverdale 46120
Norman S. Tirsway, Adm.

Eventide Rest Home
R. R. 2, Greencastle 46135
Cletus O. and Daisy L. Sult, R.N., Adms.

Greencastle Christian Home
102 W. Poplar St., Greencastle 46135
Rev. L. C. Ziegler, Adm.

Putnam County Home
R. R. 3, Greencastle 46135
Robert Aubrey, Adm.

Ruark Nursing Home
R. R. 1, Fillmore 46128
Elsie C. Ruark, Adm.

Sunset Manor Nursing Home
1109 S. Indiana St., Greencastle 46135
Robert & Bessie Goldsberry, Adms.

RANDOLPH COUNTY

Parrott's Home
304 W. Sherman St., Lynn 47355
Willis R. and Mary Maxine Parrott, Adms.

RIPLEY COUNTY

Davis Nursing Home
S. Main St., Sunman 47041
Edward and Anna Davis, Adms.

Gilland Nursing Home #1
310 Cravens St., Osgood 47037
Mildred Gilland, Adm.

Gilland Nursing Home #2
120 E. Ripley St., Osgood 47037
Mildred Gilland, Adm.

Gilland Nursing Home #3
Glasgow and Willson, Osgood 47037
Dan and Mildred Gilland, Adms.

Health and Hospitality Center
Carr St., Milan 47031
Alfred J. Colson, Adm.

Schwing Nursing Home
R. R. 1, Sunman 47041
Donald J. Schwing, Adm.

RUSH COUNTY

Hillside Haven
424 North Perkins St.,
Rushville 46173
Mary Todd, R.N., Adm.

Gorman's Rest Home
Railroad St., Milroy 46156
Thomas and Elizabeth Gorman, Adms.

Jackson Nursing Home
612 E. 11th St., Rushville 46173
Marjorie Pearsey, L.P.N., Adm.

Jackson Nursing Home
114 E. Fifth St., Rushville 46173
Marjorie Pearsey, L.P.N., and Goldie J. Lyons, L.P.N., Adms.

Rowland's Nursing Home
230 E. Seventh St., Rushville 46173
Willard and Nora Lee Rowland, Adms.

ST. JOSEPH COUNTY

Barbara Morrow Home
1107-09 S. Main St., South Bend 46618
Barbara Morrow, Adm.

Calvert Convalescent Home
1844 E. Calvert, South Bend 46614
Karen Harris, L.P.N., Adm.

****Cardinal Nursing Home, Inc.**
118 S. Williams St., South Bend 46601
Thomas E. Squibb, Adm.

Dodge Home for Old People
318 E. Third St., Mishawaka 46544
Florence Moss, Adm.

Dor-A-Lin, Inc.
1024 N. Notre Dame Ave.,
South Bend 46617
Edward L. Finkenbinder, Adm.

Farris Nursing Home
1021 W. Washington St.,
South Bend 46601
Helen M. Farris, Adm.

Farris Nursing Home #2
1044 Lincolnway West,
South Bend 46616
Helen M. Farris, Adm.

Golden Age Manor Corporation
811 East 12th St., Mishawaka 46544
Gloria McCullough, Adm.

Haven Hubbard Memorial Home
New Carlisle 46552
Mearl L. Dustin, Adm.

Krogh Nursing Home
109 N. Cedar St., Mishawaka 46544
Joyce Wood, L.P.N., Adm.

Melrose Manor
601 S. Russell St., Mishawaka 46544
Eunice Turner, L.P.N., Adm.

Morningside Nursing Home, Inc.
18325 Bailey Ave., South Bend 46637
William and Pauline Locks, R.N., Adms.

Oak Haven Rest Home
714 W. Oak St., South Bend 46616
Myrtle B. Joyce, Adm.

River Park Nursing Home
2706 Wall St., South Bend 46615
William G. Swintz, Adm.

River Park Nursing Home
915 27th St., South Bend 46615
William G. Swintz, Adm.

Robert P. and Clara I. Milton Home, Inc.
206 E. Marion St., South Bend 46601
Mrs. T. E. Mauch, Adm.

St. Joseph County Home
53308 Portage Rd., South Bend 46628
Joseph W. Snyder, Adm.

Susie H. Beiger Old Ladies Home
317 Lincolnway East,
Mishawaka 46544
Florence Moss, Adm.

Walkerton Nursing Home
500 Roosevelt Road, Walkerton 46574
Roy and Ruth DeSimone, Adms.

Wilton Rest Home
25419 St. Rt. 2, South Bend 46619
William Grzywinski, Adm.

SCOTT COUNTY

Roe-Seal Memorial Home
Englishton Park, Lexington 47138
Russell R. Byers, Adm.

Shalom Convalescent and Nursing Home
Highway 31 South, Scottsburg 47170
William and Virginia Lippert, R.N., Adms.

SHELBY COUNTY

Ace Placid Home
R. R. 1, Fairland 46126
Dewey F. Murphy, Adm.

Conover Rest Home
Box 311, Morristown 46161
Charles Conover, Adm.

****The Heritage House Convalescent Center**
2309 S. Miller St., Shelbyville 46377
Robert Norman, Adm.

Waldron Nursing Home
Box 95, Waldron 46182
Kathleen L. Kuhn, Adm.

SPENCER COUNTY

Rockport Nursing Center, Inc.
815 Washington St., Rockport 47635
Donald R. and O. Jane Thomason, Adms.

Spencer County Home
R. R. 1, Rockport 47635
Chester Rininger, Adm.

STARKE COUNTY

Knox Nursing Home
302-306 Culver St., Knox 46534
Kenneth Crowel, Adm.

****Little Company of Mary Health Facility, Inc.**
Route 421, San Pierre 46374
Sister Margaret Mary Doherty, Adm.

STEUBEN COUNTY

Edith Nursing Home
116 Powers St., Angola 46703
Helen Taylor, Adm.

Steuben County Rest Home
R. R. 3, Angola 46703
Marshall Coler, Adm.

SULLIVAN COUNTY

Sullivan County Home
R. R. 5, Sullivan 47882
Mr. and Mrs. Walter Houghton, Adms.

****Sullivan Nursing Home**
W. Wolfe St., Sullivan 47882
O. R. and Mary J. Blubaugh, Adms.

SWITZERLAND COUNTY

Jackson's Boarding Home For The Aged
501 West Pike St., Vevay 47043
Harry B. and Peggy Jackson, Adms.

Continued

NURSING HOMES

Continued

TIPPECANOE COUNTY

Burnett Convalescent Home
221 S. Ninth St., Lafayette 47901
Maude L. Golden, L.P.N., Adm.

****Comfort, Inc.**
312 N. Eighth St., Lafayette 47901
Allen C. and Clara E. Campbell, R.N., Adms.

Indiana Knights of Pythias Home
1501 South 18th Street, Lafayette 47905
Ray C. Haley, Adm.

Lafayette Care, Inc.
3400 Soldiers Home Rd., W. Lafayette 47906
J. Wilborn Garrison, Adm.

Laura M. Bowles Convalescent Home
147 Ford St., Clarks Hill 47930
Laura M. Bowles, L.P.N., and Laura L. Peterson, Adms.

Lesley Nursing Home
Buck Creek 47924
Rosina Lesley, Adm.

Scott Nursing Home
1100 N. Ninth St., Lafayette 47901
Robert Bibler, Executor of Goldie Scott Estate, Adm.

Tippecanoe County Home
R. R. 1, Lafayette 47901
Charles and Dorothy Haan, Adms.

Tippecanoe County Home-Ross Annex
R. R. 6, Lafayette 47901
Lucille M. Klaiber, Adm.

TIPTON COUNTY

The Higgins Home
R. R. 1, St. Rd. 19, Tipton 46072
Robert D. and Eileen G. Higgins, L.P.N., Adms.

Holtsclaw Nursing Home
119 W. Washington St., Tipton 46072
Margaret Holtsclaw, Adm.

Tipton County Home
R. R. 1, Tipton 46072
Lester Dodd, Adm.

UNION COUNTY

Park Manor Home, Inc.
409 E. Union St., Liberty 47353
Phyllis J. McMurphy, R.N., Adm.

VANDERBURGH COUNTY

Agnes Hawes Boarding Home for the Aged
408 N. Third Ave., Evansville 47710
Agnes Hawes, Adm.

Bethany Rest Home
316 N. Wabash Ave., Evansville 47712
Mary Ashworth, Adm.

Bethel Sanitarium, Inc.
6015 Kratzville Rd., Evansville 47710
Louise Kuiken, R.N., Adm.

Bethel Sanitarium, Inc., Annex
5825 Kuiken Dr., Evansville 47710
Louise Kuiken, R.N., Adm.

Boehne Convalescent Home, Boehne Hospital
Evansville 47712
Vernon Stannard, Adm.

Braun's Nursing Home
909 First Ave., Evansville 47710
Roy L. and Ruth H. Braun, Adms.

Dellaren Nursing Home
816 North First Ave., Evansville 47710
Robert E. Arendell, M.D., Adm.

Evansville Protestant Home for the Aged
3701 Washington Ave., Evansville 47715
Helen E. Kinkle, Adm.

Gertha's Nursing Home
605 Oakley St., Evansville 47710
Gertha Hendrickson, Adm.

Good Samaritan Home
601 N. Boeke, Evansville 47711
N. R. Allsmiller, Adm.

M & R Nursing Home
1100 N. Read St., Evansville 47710
Mrs. Muriel Sprinkle, L.P.N., Adm.

Newton Rest Home
921-23 S. Elliott St., Evansville 47710
Mary Alice Trimble, Adm.

Pine Haven
3401 Stocker Dr., Evansville 47712
Anita M. Stocker, R.N., Adm.

Rathbone Memorial Home for Aged and Infirm Persons
1320 S. E. Second St., Evansville 47713
Lois Leeson, R.N., Adm.

****Regina Pacis Home**
3900 Washington Ave., Evansville 47715
Rev. William H. Muller, Adm.

****Robert's Nursing Home**
2819 N. St. Joseph Ave., Evansville 47712
Robert Burton, Adm.

Tri-State Community Rest Home
821 Judson Street, Evansville 47713
Edna H. Robinson, Adm.

Vanderburgh County Home
700 Senate Ave., Evansville 47711
Albert E. Breedlove, Adm.

VERMILLION COUNTY

Dana Convalescent Home
Dana 47847
Louise Barton, Adm.

The Ivy Haven Home
232 Ash St., Clinton 47842
Lena M. Gruelich, Adm.

Layman Nursing Home
432 S. Fifth St., Clinton 47842
Mildred Layman, Adm.

Vermillion County Nursing Home
R. R. 1, Hillsdale 47854
Ralph Brown, Adm.

VIGO COUNTY

Allendale Nursing Home
R. R. 2, Box 12, Terre Haute 47802
Lucille McCoskey, Adm.

Brandon Residence for Elderly People
220 N. Fourth St., Terre Haute 47807
Margaret L. Bartsch, Adm.

Clara Fairbanks Home for Aged Women, Inc.
721 Eighth Ave., Terre Haute 47804
Fern Crowder, R.N., Adm.

Ewing Nursing Home
504 S. 15th St., Terre Haute 47807
Mary C. Ewing, R.N., Adm.

Ezell Boarding Home
43 S. 20th St., Terre Haute 47803
Ruby Ezell, Adm.

**Meadows Manor
3300 Poplar St., Terre Haute 47803
Guy Belzile, B.A., R.P.T., Adm.

Sarah Dowling Home
1016 N. Sixth St., Terre Haute 47807
Daisy Clark, Adm.

Vigo County Home
3500 Maple Ave., Terre Haute 47804
Carl Koile, Adm.

**Wallace Nursing Center
120 W. Margaret Ave., Terre Haute 47802
Evelyn Wallace, Adm.

Webster's Rest Home
513-15 North 14th St., Terre Haute 47807
Ernest Webster, Adm.

WABASH COUNTY

The Estelle Peabody Memorial Home
Seventh and Buffalo, North Manchester 46962
William Visser, Adm.

**Friendly Nursing Home, Inc.
1420 Quaker Ave., Wabash 46992
Jean Leakey, Adm.

Pleasant View Nursing Home
R. R. 2, Wabash 46992
Virgil L. and Lois M. Sweares, Adms.

**The Stratford House
1035 Manchester Ave., Wabash 46992
Ruth Durham, R.N., Adm.

WARREN COUNTY

Davis Boarding Home
R. R. #2, Covington 47932
John W. Davis, Adm.

Pleasant Valley Retirement and Convalescent Lodge
Kramer 47953
Walter R. and Dorothy D. Ruark, R.N., Adms.

WARRICK COUNTY

Baker's Rest Haven
305 E. North St., Boonville 47601
Viola Baker, L.P.N., Adm.

**Shady Rest Nursing Home
Outer State Street, Chandler 47610
Pearl Bradfield, Adm.

Thornton Home-Stitt Infirmary
E. Jennings Lane, Newburg 47630
Minnie Highsmith, Adm.

WASHINGTON COUNTY

Williams Convalescent Center, Inc.
Homer and Anson Sts., Salem 47167
Kathleen Williams, L.P.N., Adm.

WAYNE COUNTY

**Friends Fellowship Community, Inc.
2030 Chester Blvd., Richmond 47374
James J. Boomgard, Jr., Adm.

Friendship Home
306 S. 10th St., Richmond 47374
Grace Flatley, Adm.

Gains Nursing Home
R. R. 2, Richmond 47374
Emma Gains, Adm.

Glen Aire Nursing Home
2116 E. Main St., Richmond 47374
Eileen Singleton, Adm.

Golden Rule Nursing Home #1
47 S. Seventh St., Richmond 47374
Hilda Stull, L.P.N., Adm.

Good Will Rest Home
500 W. Main, Cambridge City 47327
Nell Osborne, Adm.

Hilling's Nursing Home
R. R. 1, Box 237, Centerville 47330
Betty L. Hilling, Adm.

Jenkins Hall
N. 10th St., Richmond 47374
G. Dale Splitstone, Adm.

Mary E. Hill Nursing Home for Aged Colored Women, Inc.
2308 Zoar Ave., Richmond 47374
Robert Mills, Adm.

Owens Convalescent Home
1811 S. Ninth St., Richmond 47374
Bonnie Owens, Adm.

Pinchurst Nursing Home
R. R. 1, Centerville 47330
Bonnie Esta Cole, Adm.

Twin Pines Nursing Home
Main St., Economy 47339
Elizabeth Johnson, Adm.

WELLS COUNTY

Clark Nursing Home
522 E. South St., Bluffton 46714
Robert H. and I. Evelyn Sprinkle, Adms.

Cooper Rest Home
306 W. Wabash Ave., Bluffton 46714
Janet E. Cooper, R.N., Adm.

Southview Rest Home
R. R. 3, Box 306, Bluffton 46714
Cora N. Anderson, L.P.N., Adm.

WHITE COUNTY

Archibald Memorial Home for Aged Deaf
R. R. 2, Brookston 47923
Donald Herran, Adm.

Lake Manor Nursing Home
R. R. 6, Monticello 47960
Robert and Ione Don, Adms.

Lake View Home
R. R. 6, Monticello 47960
Ora Rumple, Adm.

Monticello Nursing Home, Inc.
226 N. Illinois St., Monticello 47960
Gerald L. Eastburg, Adm.

WHITLEY COUNTY

Hillcrest Home
710 W. Ellsworth St., Columbia City 46725
Herman O. and Edith M. Oelschlager, R.N., Adms.

Irvin Nursing Home
604 W. Van Buren St., Columbia City 46725
Marguerite O. Irvin, Adm.

South Whitley Rest Home, Inc.
110 W. Columbia St., South Whitley 46787
Katherine A. Bresnahan, R.N., Adm.

Whitley County Home
R. R. 1, Columbia City 46725
Mrs. Owen Zumbrun, Adm. ◄

Outpatient Mental Health Facilities In the State of Indiana: 1967

BERNARD LUBIN, Ph.D.
ALBERT LINCH, ACSW
Indiana Department of Mental Health
Indianapolis

Following is a list of outpatient mental health facilities in the state of Indiana, alphabetized by city of location. The reader who might be interested in additional services (family services, pastoral counseling, psychological testing and a more detailed listing of services, staff and application procedure) should consult the listing of June, 1966[+].

Bloomington

Indiana University Psychological Clinic, Psychology Building, 47401. (812) 337-2311.
Delton C. Beier, Ph.D., Director.

Columbus

*Bartholomew County Mental Health and Guidance Center, 1541 Hutchins Ave., 47201. (812) 372-7877.
George C. Weinland, M.D., Medical Director.

Elkhart

*Adult and Child Guidance Clinic of Elkhart County, Inc., 224 West High St., 46514. (219) 522-4522.
John U. Keating, M.D., Medical Director.

*Oaklawn Psychiatric Center, Inc., 2600 Oakland Ave., 46514. (219) 523-3350.
Otto D. Klassen, M.D., Medical Director. Robert W. Hartzler, Administrator.

Evansville

*Southwestern Indiana Adult Mental Health Center, Inc., 200 Cherry St., 47713. (812) 425-4251.
John P. Longstaff, M.D., Medical Director.

The Rehabilitation Center, Inc., 3701 Bellemeade Ave., 47713. (812) 477-5381.
Henry Liebundguth, M.D., Medical Director. Spiro B. Mitsos, Ph.D., Administrator.

*Vanderburgh Child Guidance Center, 1 North Barker Ave., 47712. (812) 424-8227.
Lillian Moulton, M.D., Medical Director.

Fort Wayne

*Adult Psychiatric Center of Northeast Indiana, 227 East Washington Blvd., 46802. (219) 743-5471 ext. 215.
Joseph P. Fiacable, M.D., Director. Steve P. Nestor, ACSW, Administrator.

*Fort Wayne Child Guidance Center, Inc., 227 East Washington Blvd., 46802. (219) 743-5471 ext. 217.
Robert L. Greenlee, M.D., Medical Director. Richard Noel, ACSW, Administrator.

Gary

*Lake County Mental Health Clinic, 4801 West 5th Ave., 46406. (219) 949-9031.
Krystyna Sklenarz, M.D., Medical Director.

**Northwest Indiana Alcoholism Clinic, 4938 West 5th Ave., 46406. (219) 949-4275.
Anna S. Brand, M.D., Medical Director. Ross Stanton, Acting Administrator.

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* Partially supported by the Indiana Department of Mental Health.

** Completely supported by the Indiana Department of Mental Health.

+ Lubin, B., Linch, A.: Outpatient Mental Health Facilities in the State of Indiana: 1966, *JISMA* 59:553-561, 1966.

Indianapolis

Adult Psychiatry Clinic, Indiana University Medical Center, 1100 West Michigan St., 46207. (317) 639-7422.
John E. Kooiker, M.D., Medical Director.

**Central Indiana Alcoholism Clinic, Bahr Treatment Building, 3000 West Washington St., 46222. (317) 639-5304.
Jerome V. Pace, M.D., Medical Director.
Daniel J. Crowe, ACSW, Administrator.

*Child Guidance Clinic of Marion County, Inc., 1949 East 11th St., 46201. (317) 632-5381.
Edward C. Shipley, M.D., Medical Director.

Epilepsy Clinic of The Indiana University Medical Center, First Floor, Riley Hospital, 46207. (317) 639-8747.
Joseph B. Green, M.D., Medical Director.

Episcopal Community Services, Inc., 1537 Central Ave., 46220. (317) 635-2538.
David Phillips, M.D., Medical Director.
The Rev. Canon Frank V. H. Carthy, Executive Director.

**Larue D. Carter Memorial Hospital — Outpatient Clinic, 1315 West 10th St., 46207. (317) 634-8401.
Joseph A. FitzGerald, M.D., Director.

Marion County General Hospital, Outpatient Psychiatry Clinic, 960 Locke St., 46207. (317) 636-6331.
William T. Paynter, M.D., Medical Director.

Pediatric-Neurology Clinic (formerly James Whitcomb Riley Memorial Clinic for Intellectually Handicapped Children), First Floor, Riley Hospital, 46207. (317) 639-8747.
Arthur L. Drew, M.D., Medical Director.

Pediatric Neurology Clinic, Marion County General Hospital, 960 Locke St., 46207. (317) 636-6331.
Paul R. Dyken, M.D., Director.

*Riley Child Guidance Clinic, Indiana University Medical Center, 1100 West Michigan St., 46207. (317) 639-8162.
Nancy Roeske, M.D., Director.

Veteran's Administration Regional Office, Mental Hygiene Clinic, 36 South Pennsylvania St., 46209. (317) 633-7113.
John H. Greist, M.D., Acting Medical Director. E. U. Robinson, M.D., Administrator.

Jeffersonville

*Southern Indiana Mental Health and Guidance Center, Inc., Route 3, Box 320E, 47130. (812) 282-3929.
Joseph B. Brill, M.D., Medical Director.
Kenneth Shore, ACSW, Executive Director.

Continued

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Kokomo

*Guidance Center of Howard County, Inc., 308 West Taylor St., 46901. (317) 452-5667.

John M. Hoyt, M.D., Medical Director. David M. Barnett, ACSW, Administrator.

Lafayette

Purdue Psychological Services Center, Education Building, Purdue University, West Lafayette, 47907. 92-2754.

John M. Hadley, Ph.D., Director.

*Tippecanoe County Mental Health Center, Inc., 2900 North River Road, West Lafayette, 47906. 743-9656.

Joe M. Martin, M.D., Medical Director. Clayton Hudson, ACSW, Administrator.

Lawrenceburg

*Community Mental Health Clinic, Inc., Lawrenceburg, 47025.

Jane M. Shutt, M.D., Director and Psychiatrist.

Logansport

*Guidance Center, Inc., 406 Barnes Building, 46947. 753-6441.

Heracleo Matheu, M.D., Medical Director.

Madison

**Madison State Hospital, Madison, 47251. (812) 265-2611.

Ott B. McAtee, M.D., Medical Director.

Marion

*Grant County Mental Health Clinic, 412 South Boots St., 46952. (317) 664-0631.

Larry K. Musselman, M.D., Medical Director. Mrs. Margaret Straight, ACSW, Administrator.

Michigan City

*Adult and Child Guidance Clinic for LaPorte County, 701 Washington St., 46360. (219) 872-7279.

Robert Schmitt, M.D., Medical Director. Kathleen Durkott, ACSW, Executive Director.

Muncie

*Delaware County Child Guidance Clinic, 1711 Riverside, 47303. (317) 288-1928.

Edward A. Tyler, M.D., Medical Director. Robert A. Stump, ACSW, Administrator.

Richmond

*Child Guidance Clinic of Wayne County, Inc., 54 South 15th St., 47374. (317) 962-1523.

Robert W. Schmitt, M.D., Medical Director.

South Bend

*The Mental Health Center of St. Joseph County, Inc., 527 West Colfax Ave., 46601. (219) 233-5123.

Harold G. Nichols, M.D., Medical Director.

Terre Haute

*Vigo County Adult and Child Guidance Clinic, 415 North 9th St., 48707. 235-6291.

Gene D. Moore, M.D., Medical Director. Harold E. Wilson, ACSW, Administrator.

Valparaiso

Porter County Guidance Clinic, 808 LaPorte Ave., 46383. (219) 462-5521.

Myron E. Berkson, M.D., Medical Director.

Warsaw

*Four County Mental Health Clinic, Inc., 422 South Buffalo St., 46580. (219) 267-7169.

Frank D. Hogle, M.D., Director. William Kurosky, Chief Social Worker. ◄

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Poison Control Centers in Indiana

and Adjacent States

***** ATTENTION: Physicians, Hospitals and Poison Control Centers.**

Commencing July 1, 1965, Marion County General Hospital, Indianapolis, Indiana, will become the principal INFORMATION CENTER for the State of Indiana replacing that service provided by the Indiana State Board of Health. If you need help in determining the toxic ingredients in a "trade name product" or have a problem involving treatment of a poisoning case, please call MARION COUNTY GENERAL HOSPITAL, INDIANAPOLIS, INDIANA — 636-6331 or 630-7532.

City	Name and Address	Telephone	Director
Anderson	St. John's Hickey Memorial Hospital 127 West 19th Street	643-3391, Ext. 82 or 35	William L. Stephens
Angola	Cameron Memorial Hospital, Inc. 416 E. Maumee	665-2141	Irene Kenyon, R.N.
Bedford	Dunn Memorial Hospital 1616 23rd Street	BRowning 5-3331, Ext. 32	Marshall S. Wallner
East Chicago	St. Catherine Hospital 4321 Fir Street	EXport 7-3080	Jack M. Troy, M.D.
Elkhart	Elkhart General Hospital 600 East Boulevard	JAckson 3-5350, Ext. 224	C. Richard Yoder, M.D.
Evansville	Protestant Deaconess Hospital 600 Mary Street	HArrison 4-8011, Ext. 247	Edward J. Wolfgang
Evansville	St. Mary's Hospital, Inc. 3700 Washington Avenue	GReenleaf 7-1541, Ext. 328	Kenneth Wilhelmus, M.D.
Evansville	Welborn Memorial Baptist Hospital, Inc. 412 S. E. Fourth Street	HArrison 3-3103 Ext. 336, 337	Charles L. Warner, M.D.
Fort Wayne	Parkview Memorial Hospital 2200 Randalia Drive	743-7341, Ext. 530	William O. Wissman
Fort Wayne	St. Joseph Hospital 730 West Berry Street	ANthony 4121, Ext. 2663	Miss Angeline Holbrook, R.N.
Frankfort	Clinton County Hospital 1300 S. Jackson Street	654-4451	Fred W. Flora, M.D.
Gary	Methodist Hospital of Gary, Inc. 1600 West 6th Avenue	882-9461, Ext. 709	Glen T. Dresher, R. N.

City	Name and Address	Telephone	Director
Goshen	Goshen General Hospital 200 High Park Avenue	KEystone 3-2141 (Emergency Room)	Willard S. Krabill, M.D.
Hammond	St. Margaret Hospital 25 Douglas Street	WEstmore 2-2300, Ext. 700	Herbert I. Arbeiter, M.D.
Indianapolis	*Marion County General Hospital 960 Locke Street	MElrose 6-6331, or 630-7532	Richard W. Dyke, M.D.
Indianapolis	Methodist Hospital of Indiana, Inc. 1604 North Capitol Ave.	WAlnut 4-6411, Ext. 752, 753 or 754	Maxine Bush, R.N.
Indianapolis	St. Francis Hospital North 17th Avenue Beech Grove, Indiana	STate 7-3311	H. N. Grimes, M.D.
Kokomo	Howard Community Hospital 3500 S. Lafountain	GL 7-6611, Ext. 233, 234	Don E. Gillaspy
Lafayette	St. Elizabeth Hospital 1501 Hartford Street	SH 2-0221, Ext. 313 or 317	Sister M. Josita
West Lafayette	Purdue University Student Health Center	92-2446 Ext. 54	Loyal W. Combs, M.D.
LaGrange	LaGrange County Hospital R. R. #1	463-2144	Merle V. Rawson
Lebanon	Witham Memorial Hospital 1124 N. Lebanon Street	LEbanon 143 or 2447, Ext. 44	Thomas Dillon, D.O.
Madison	The King's Daughters' Hospital 112 Presbyterian Ave.	265-5211	Verlie Blanc, R.N.
Marion	Marion General Hospital Wabash and Euclid Avenue	NOrth 4-1228, Ext. 44	R. W. Schroeder, M.D.
Mishawaka	St. Joseph Hospital 215 West 4th Street	BLackburn 9-1431	Abner H. Levkoff, M.D.
Muncie	Ball Memorial Hospital 2401 University Avenue	284-3371, Ext. 241	Junia L. Rice, R.N.
Portland	Jay County Memorial Hospital 505 West Arch Street	726-7131, Ext. 67	Forrest E. Keeling, M.D.
Richmond	Reid Memorial Hospital Spring Grove	25481, Ext. 222	Mrs. Jessie Snyder, R.N.
Shelbyville	William S. Major Hospital 150 W. Washington Street	EX 8-6661	Carolyn Rosenfeld, R.N.

*Poison Information and Treatment Center.

City	Name and Address	Telephone	Director
South Bend	Memorial Hospital of South Bend Poison Control Center 615 North Michigan Street	234-9041, Ext. 258	William B. Frey, M.D.
South Bend	St. Joseph Hospital 811 East Madison Street	CEntral 4-2151	Leslie M. Bodnar, M.D.
Terre Haute	Union Hospital, Inc. 1606 N. Seventh Street	CRawford 0361, Ext. 229	Joseph P. Gillotte, M.D.
Tipton	Tipton County Memorial Hospital 1032 S. Main Street	OSburn 5-7411	George L. Compton, M.D

ADJACENT STATES

ILLINOIS

City	Name and Address	Telephone	Director
Chicago	Poison Control Center Presbyterian—St. Luke's Hospital 1753 W. Congress Pkwy.	SEeley 8-4411, Ext. 2322	Joseph Christian, M.D.

KENTUCKY

Louisville	Poison Control Center Department of Pediatrics 323 E. Chestnut St.	JUniper 2-1831	Thomas A. Courtenay, M.D.

MISSOURI

St. Louis	Poison Control Center Cardinal Glennon Memorial Hospital for Children 1465 S. Grand Ave.	MOhawk 4-7222, Ext. 216	Vincent J. LoPiccolo, M.D.
St. Louis	Poison Control Center St. Louis Children's Hospital 500 S. Kingshighway	FOrest 7-6880	J. Neal Middlekamp, M.D.

OHIO

Cincinnati	*Poison Control Center Cincinnati Academy of Medicine 320 Broadway	721-2345	John A. Williams, M.D.
Columbus	Poison Control Center Children's Hospital 17th St. at Livingston Park	CLearbrook 8-9783	Phillip Ambuel, M.D.

* Informational services only



The Arthritis Foundation salutes the thousands of dedicated physicians who volunteer their services in the nation's fight against crippling arthritis.

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Medical Director

DISEASE PREVENTION by Immunization and Chemoprophylaxis*

Disease	*Agent Used*	*Recommended For*	*Method of Administration*	*Type of Immunity*	*Duration of Protection*	*Booster Injection*
Cholera	Cholera Vaccine	Adults	—0.5 cc. subcutaneously followed by 1.0 cc. in 7 days.	Active	6 months	0.12-1.0 cc. according to age every six months in endemic areas.
		Children: 6 months to 2 years 3-6 years 7-10 years 11 years and older	Three subcutaneous injections given 7-10 days interval. (1) 0.06 cc.; (2) 0.12 cc.; (3) 0.12 cc. (1) 0.12 cc.; (2) 0.25 cc.; (3) 0.25 cc. (1) 0.25 cc.; (2) 0.5 cc.; (3) 0.5 cc. Adult schedule			
Diphtheria	Diphtheria Antitoxin	All early cases	Usually intramuscular if seen within 48 hours of onset. *Warning:* Test for sensitivity to horse serum. May be used intravenously in severe nasopharynx cases. Dosage dependent on degree of toxicity rather than age and weight. 10,000 units to 75,000 units.	Passive	Short	Additional antitoxin given dependent upon illness and toxicity.
Diphtheria	Diphtheria Toxoid (fluid or alum precipitated or aluminum phosphate adsorbed, for adult use)	Children older than 11 years and adults	Two intramuscular injections of 0.5 cc. each, four to six weeks apart for primary immunization or if individual has not had a booster dose of vaccine for 3 years.	(If toxoid is given then active immunity develops.)	Indefinite	0.5 cc. every year.
Diphtheria	Diphtheria-Pertussis-Tetanus alum precipitated or aluminum hydroxide (or aluminum phosphate) adsorbed diphtheria and tetanus toxoids; containing 12 protective antigenic units of vaccine per 1.5 cc. (DPT)	Children under 5 years	(1) First dose of 0.5 cc. deep intramuscularly—follow injection with 0.1-0.2 cc. air. Given 1-3 months age. (2) Second dose of 0.5 cc. deep intramuscularly one month after first dose. (3) Third dose of 0.5 cc. deep intramuscularly one month after 2nd dose. (4) If 1st dose given earlier than 3 months of age, then give fourth dose 2-3 months after series completed.	Active	Indefinite	D. P. T. booster of 0.5 cc. at 12 to 18 months and 4-5 years. After 5 years booster dose of 0.5 cc. Diphtheria Tetanus Toxoid every 3 years to age 11 years.
Diphtheria	Diphtheria Tetanus Toxoid alum precipitated or aluminum hydroxide (or aluminum phosphate) adsorbed.	Children over 5 years and up to 10 years	(1) First dose of 0.5 cc. deep intramuscularly, follow injection with 0.1-0.2 cc. air. (2) Second dose of 0.5 cc. deep intramuscularly—follow injection with 0.1-0.2 cc. air.	Active	Indefinite	Diphtheria Tetanus booster 0.25 cc. to 0.5 cc. *Caution:* Do not give to children past 10 years of age.

Diphtheria	Diphtheria Toxoid Pertussis Vaccine Tetanus Toxoid Fluid	Rapid immunization of children under 10 years	Three doses of 0.5 cc. given subcutaneously at intervals of 3-4 weeks. In face of epidemic injections may be given at one week intervals.	Active	Antigenic response lower than with the alum preparations and does not last as long.	0.5 cc. every 2 years.
Diphtheria	Diphtheria Toxoid Tetanus Toxoid Fluid	Rapid immunization under 10 years	Three doses 0.5 cc. given subcutaneously at intervals of 3-4 weeks. In face of epidemic injections may be given at intervals of one week.	Active	Antigenic response lower than with alum preparations and does not last as long.	0.5 cc. every 2 years.
Hepatitis, Infectious (Epidemic)	Immune Serum Globulin (Gamma Globulin)	All exposed in household, institution, etc.	Dosage: 0.01 cc. per pound of body weight. Given intramuscularly.	Passive	Brief	Repeat each exposure.
Influenza	Polyvalent Vaccine	Use during epidemics		Active (in 70% + immunized)	Short: 3-4 months	Repeat primary injection and/or injections annually.
		Children	Give total of 1.0 cc. in the course of one week.			
		Adults—especially all with chronic debilitating disease of heart and lungs.	1.0 cc. subcutaneously. *Warning:* Precautions must be taken in individuals sensitive to egg protein. *(Note:* There is less chance of local or systemic reaction if only 0.1 cc. is given intradermally for a total of 2 doses 7-10 days apart).			
Measles (1)	Live, Attenuated Vaccine	12 months and older	1	Active	Unknown	Although the live, attenuated vaccine may be administered safely with or without the simultaneous administration of Measles Immune Globulin, most physicians will wish to use the two combined because of the lessened frequency of clinical reactions.
(2)	Live, Attenuated Vaccine plus Measles Immune Globulin	12 months and older	1 plus Measles Immune Globulin (.01 cc per pound at different site with different syringe)	Active	Unknown	The live attenuated vaccines should be administered only to those 12 months of age or older since residual maternal antibody may interfere with a satisfactory response among younger children.

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Measles						
(3)	Live, "Further Attenuated Vaccine"	12 months and older	1	Active	Unknown	Clinical reactions following the "Further Attenuated Vaccine" are relatively infrequent; Measles Immune Globulin is not necessary with this Vaccine.
(4)	Inactivated Vaccine	Any Age	3* (monthly intervals) plus a booster dose after one year	Active	Unknown	In view of the rapid fall-off in antibody and evidence of decreasing immunity following a primary immunization series, use of this vaccine is not preferred except for special groups in which live attenuated vaccine is contraindicated. The degree and duration of protection which might be afforded to those given a booster has not yet been determined.
(5)	Inactivated Vaccine followed by Live, Attenuated Vaccine	12 months and older	1 dose inactivated vaccine followed in 1 to 3 months by 1 dose live attenuated vaccine	Active	Unknown	The preceding administration of inactivated vaccine serves to reduce the frequency and severity of clinical reactions following live attenuated vaccine administration.
		Under 12 months	3 doses inactivated vaccine at monthly intervals followed by 1 dose live attenuated vaccine at 12 months of age or older.	Active	Unknown	The live attenuated vaccine should be administered only to those 12 months of age or older since residual maternal antibody may interfere with a satisfactory response among younger children.

* In view of rapidly declining antibody levels and protection, at least one booster dose about a year later is necessary. Data are not yet available to indicate when or with what frequency additional booster doses might be required.

Meningococcic Meningitis	Sulfadiazine	Control of exposed persons in community groups Children up to 11 yrs.	0.5 m. twice daily for 2 days.	None Chemical prophylaxis only	Very brief—for one exposure only.	Repeat following each exposure.
		Adults (and children 12 yrs. or over)	1.0 gm. twice daily for 2 days.			
Mumps	Mumps Vaccine	Adults exposed to case and with negative history of having had mumps	*Warning:* Check on sensitivity to egg protein. Two injections given 5 to 10 days apart of 1.0 cc. each subcutaneously.	Active	Brief	Previously immunized persons may be given booster dose of 0.5 to 1.0 cc. subcutaneously.
Pertussis	Pertussis Vaccine saline suspended (See Double and Triple antigens under "Diphtheria")	Children during epidemic	A total of 12 N. I. H. units divided into 3 equal doses of 4 N. I. H. units (0.5 cc.) given subcutaneously at intervals of one week.	Active	Indefinite	1 year after primary series, 2 years after primary series and then every three years to 6 or 7 years of age.
	Pertussis Vaccine alum precipitated or aluminum hydroxide adsorbed (See Double and Triple antigens under "Diphtheria")	Routine immunization of infants when DPT is contraindicated	A total of 12 N. I. H. units divided into 3 equal doses of 4 N. I. H. units each (0.5 cc.) injected intramuscularly at intervals of 4 to 6 weeks.	Active	Indefinite	18 months—3-4 years. 6-7 years usually given as DPT.
		Exposure Recall		Active	Indefinite	.4 NIH units (0.5 cc.) saline suspension subcutaneously if child has not had immunization past 2 years.
Plague	Plague Vaccine—a suspension of 2000 million killed Pasteurella per milliliter	Epidemics and areas with high endemic rate. Adults: Children: 6 months-2 years 2 years-6 years 6 years-10 years	Two injections subcutaneously 7-10 days apart. First injection 0.5 cc.; second, 1.0 cc. 0.06 cc.; 0.12 cc; 0.12 cc. 0.12 cc.; 0.25 cc.; 0.25 cc. 0.25 cc.; 0.50 cc.; 0.50 cc.	Active Active	Partial protection for period of 4-6 mos. Partial protection for period of 4-6 mos.	1.0 cc. every 4 months as long as danger of epidemic exists. Booster dose for children is same as first dose of initial series.
Poliomyelitis*	Poliomyelitis (Salk) Vaccine	All Ages	Two injections each 1.0 cc. given intramuscularly at interval of 3-6 weeks. Third injection of 1.0 cc. given 7 months after second.	Active	Not known (Salk has demonstrated adequate antibodies present after 8 years)	Booster dose of 1.0 cc. recommended 8 to 12 months after 3rd dose. Additional booster doses advised if in epidemic area.

*Poliomyelitis Vaccine, oral, live, attenuated—These vaccines are licensed. No description is given in the table as their use is largely recommended for mass immunization. The Indiana State Health Officers Association and the Indiana State Board of Health in October 1962 stated there was little need for mass oral programs and recommended no new programs be initiated.

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Rabies	Rabies—hyperimmune serum 1000 units per 40 pounds of body weight Rabies Vaccine 14-21 doses	Licks of abraded skin or mucosa by proven rabid, suspicious, escaped, killed or unknown animal	Hyperimmune serum within 24-72 hours of exposure. Follow within 24 hours with Rabies Vaccine.	Passive immunity from hyperimmune serum	Few weeks	Repeat initial dose hyperimmune serum, but not after beginning Rabies Vaccine series as serum will block antibody production. Booster 10th and 20th day after last dose vaccine.
		Bites of healthy animal, multiple, or face or head bites	Hyperimmune serum. Start vaccine but stop if animal remains normal for 5 days.	Active immunity from Rabies Vaccine	Indefinite	Rabies Vaccine prepared according to Sample method—should not repeat full course—one to 3 injections probably sufficient. More hazardous Egg embryo vaccine—give one injection.
		Bite of healthy animal, other than head or neck	No treatment. If animal becomes suspicious during 14 days observation give serum and vaccine at first suspicious signs.			Booster 10th and 20th day after last dose vaccine.
		Bites—animal rabid, escaped, killed, unknown or any bites by any wild animal	Start treatment immediately, using hyperimmune serum followed by 14-21 doses vaccine, depending upon whether single or multiple bites and location.			Booster 10th and 20th day after last dose vaccine.
		Bat bites and exposure to bats	Hyperimme serum, then start treatment with Rabies Vaccine immediately without waiting for laboratory report. Bats are only animals known to occasionally survive rabies and remain carriers.			Booster 10th and 20th day after last dose vaccine.
Rocky Mountain Spotted Fever	Rocky Mountain Spotted Fever Vaccine	Not routinely recommended since advent of specific antibiotic therapy. May be used in areas of high incidence among persons of high risk.	Adults: 3 injections each 1.0 cc. subcutaneously or intramuscularly at intervals of one week. Children—under 10 years three injections each 0.5 cc. subcutaneously or intramuscularly at intervals of one week.	Active	One year	1.0 cc. booster annually
Smallpox	Smallpox Vaccine (Vaccinia virus)	Children and adults	Begin at 5-12 months. Administered by multiple pressure technique skin over insertion of left deltoid.	Active	Indefinite, average 3 years	Repeat every 4th year.

Tetanus	**Tetanus Antitoxin**	**All cases of puncture wounds and animal bites when person has not been immunized or more than 2 years since last booster.**	**Caution: Skin test first for serum sensitivity. Intramuscular injection of 10,000 units antitoxin.**	**Passive**	**10 days**	**Repeat with each injury. Because of hazard to horse serum active immunization with toxoid preferred.**
Tetanus	Tetanus Toxoid, depot (alum precipitated or adsorbed) (See Double and Triple antigens under "Diphtheria")	All	Two doses, each 0.5 cc. given intramuscularly, at least one and preferably 2-3 months interval.	Active	At least 4 years	0.5 cc. end first year, then—booster every 2-4 years. Satisfactory recall response after 10 years but is too slow in case of injury. Emergency booster if injured.
	Tetanus Toxoid, Fluid (See Double and Triple antigens under "Diphtheria")	All	Three doses, each 0.5 cc., subcutaneoulsy or intramuscularly at one month and preferably 2-3 months between doses.	Active	At least 4 years	0.5 cc. end first year, then—booster every 2-4 years. Satisfactory recall response after 10 years but is too slow in case of injury. Emergency booster if injured.
Typhoid Fever	Typhoid Vaccine Triple vaccine containing 1000 million S. typhosa and 250 million each of paratyphoid A and B per cc.	All persons living in or traveling to areas where disease is endemic or insanitary conditions exist.	*Adults* Three doses, each 0.5 cc. subcutaneously not less than 7 days or more than 28 day intervals between doses. An alternate method is: 0.1 cc.; 0.15 cc. and 0.2 cc. given intradermally not less than 7 nor more than 28 days between doses. *Children* 6 mo.-2 yr.—(1) 0.06 cc.; (2) 0.12 cc.; (3) 0.12 cc. 2 yr.- 6 yr.—(1) 0.12 cc.; (2) 0.25 cc.; (3) 0.25 cc. 6 yr.-10 yr.—(1) 0.25 cc.; (2) 0.50 cc.; (3) 0.50 cc.	Active	Indefinite—usually at least one year	Persons traveling or living in insanitary areas should receive booster of 0.1 cc. intradermally or 0.5 cc. subcutaneously annually. Children's annual booster the same dose as initial dose of each series.
Typhus Fever	Typhus Fever Vaccine	All persons traveling to or living in areas where epidemic typhus exists.	*Adults* Two doses, each 1.0 cc. at intervals of 7-10 days given subcutaneously. Allergy to egg or chicken protein only contraindication. *Children* Three doses each: 6 mos.-2 yrs.: 0.12 cc. 2 yrs.- 6 yrs.: 0.25 cc. 6 yrs.-10 yrs.: 0.50 cc.	Active	Relative 3-6 months	*Adults* Routine every 6 months dose of 1.0 cc. given subcutaneously or whenever threat of outbreak occurs. *Children* Same dose as in initial series.

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Yellow Fever	Yellow Fever Vaccine* (Obtainable only at U. S. P. H. S. Hospital or Yellow Fever Immunization Depots. See footnote where obtainable in Indiana.)	All persons traveling in or through or living in endemic areas. Should receive vaccine 10 days before arrival in area.	One dose 0.5 cc. of a 1:10 dilution of concentrated vaccine, freshly prepared. Given subcutaneously. Should not be given to person ill with virus disease or at same time cowpox virus is given. Children's dose—same as adult.	Active	6 years or longer	As required at present every 10 years repeat immunization. In presence of epidemic repeat primary immunization.

* While many contraindications are listed for various biologicals it should be recognized that in the interest of brevity it was impossible to give all details. In case of doubt consult standard reference for detailed description of biological in question and/or pharmaceutical company's circular accompanying original package of biological.

All of the biologicals listed may be obtained through normal supply channels with the exception of Yellow Fever Vaccine. Because of hazards if yellow fever vaccine is improperly handled it can only be obtained from U. S. P. H. S. depots. In Indiana these depots are:

Indiana University Medical Center
1040 West Michigan Street
Indianapolis
Fridays, 11 a.m. to 12 noon CDT by appointment
Telephone: 639-8877

Elkhart County Health Department
200 Harrison Street
Elkhart, Indiana
1st or 3rd Wednesday each month 2 p.m.
Telephone 26525

Physicians having patients requiring yellow fever immunization should advise person to call or write the above, as inoculations are given by appointment only on one day a week. There is a fee to cover vaccine and administration.
(Revised)

A. L. Marshall, Jr., M.D., *Director*
Division of Communicable Disease Control
Indiana State Board of Health ◄



after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.



Stresscaps®

Stress Formula Vitamins Lederle

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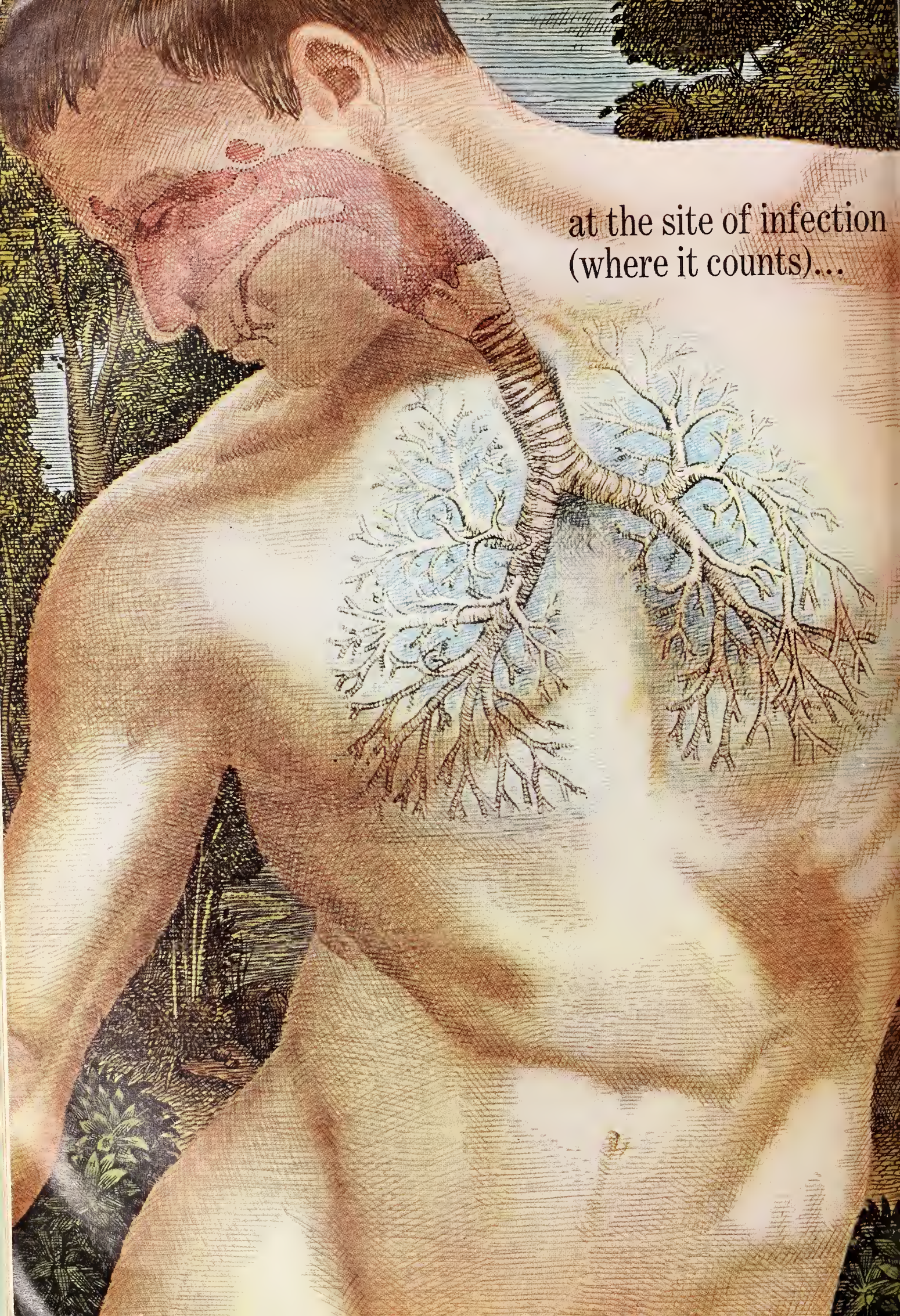
Each capsule contains:

Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

627-6—3613


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings we characterized by increased direct-reacting bilirubin, elevat alkaline phosphatase levels, negative or weakly positive cephal flocculation and thymol turbidity tests, elevated serum glutam oxalacetic transaminase levels, peripheral eosinophilia, and no mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has n been reported in other patients taking prolonged courses of t medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, a patients with rheumatic fever have taken prophylactic doses 0.5 Gm. daily for two years without difficulty. In one group 144 patients who received the drug daily for two years, no jau dice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episod of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels we determined in a group of fifty-four adults and children who to 250 mg. of Ilosone daily for an average of sixteen months rheumatic fever prophylaxis. The results were compared wi those of a similar group of forty-four patients who received pe icillin. There were no cases of jaundice in either group. Elevati of SGPT and serum alkaline phosphatase levels during the cour of treatment was observed in one patient treated with Ilosoi and in two patients treated with penicillin. Seven other patien in the group receiving Ilosone and four others in the penicill group showed elevations in one of the tests at some time durir administration of the drugs.

Very satisfactory therapeutic results, without toxicity, we reported in 102 pediatric patients who received short-term (te day) courses of Ilosone in the treatment of streptococcus infe tions. Results of liver function tests in these patients were cor parable to those in a similar control group who had receiv penicillin.

Gastro-intestinal disturbances not associated with hepatic e fects are observed in a small proportion of individuals as a resu of a local stimulating effect of the medication on the alimenta tract; however, the normal intestinal gram-negative bacteri flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the u of erythromycin, there have been occasional reports of urticari skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of bod weight, the usual dosage is 5 mg. per pound every six hours; fc children twenty-five to fifty pounds, 125 mg. every six hour (Tablets Ilosone Chewable should be chewed or crushed an swallowed with water.)

For adults and for children over fifty pounds, the usual dosag of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromyci therapy should be considered.

In the treatment of syphilis, the recommended total dosage 20 to 30 Gm. given in divided doses for a period of ten to fiftee days. Close follow-up of the patient is necessary since erythr mycin drugs have not had adequate evaluation in all stages c syphilis. Examinations of spinal fluid are recommended as pa of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days ar recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examinatio before receiving antibiotics, and monthly serologic tests shoul be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base) in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc. size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalen to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

J

703121

Class A Narcotic Drugs

The following is a compilation of Class A Narcotic Drugs by trade name, prepared for publication by the Indiana Pharmaceutical Association.

Package	Class A Narcotics by Trade Name
Tab.	Alvodine
Vial	Alvodine
Tab.	Amidone HCl.
Vial	Amidone HCl.
Tab.	A.P.C. Demerol (Demerol 30 mg.)
Supp.	B&O 15A (Opium ½ gr., Belladonna ¼ gr.)
Supp.	B&O 16A (Opium 1 gr., Belladonna ¼ gr.)
	Chlor-Anodyne (Morphine HCl. 2⅞ gr. per oz.)
	Cocaine Solutions
Solvets	Cocaine HCl. 2¼ gr.
Amp.	Codeine Phos. ½ gr. per cc.
H.T.	Codeine Phos. ¼ gr.
H.T.	Codeine Phos. ½ gr.
H.T.	Codeine Phos. 1 gr.
D.T.	Codeine Sulf. 1 gr.
H.T.	Codeine Sulf. ⅛ gr.
H.T.	Codeine Sulf. ¼ gr.
H.T.	Codeine Sulf. ½ gr.
H.T.	Codeine Sulf. 1 gr.
T.T.	Codeine Sulf. ¼ gr.
T.T.	Codeine Sulf. ½ gr.
T.T.	Codeine Sulf. 1 gr.
	Codeine, in combination, if more than 8 grs. per fl. oz. or more than 1 gr. per dosage unit
	Demerol Solutions
Amp.	Demerol 25 mg.—½ cc.
Amp.	Demerol 50 mg.—1 cc.
Amp.	Demerol 75 mg.—1½ cc.
Amp.	Demerol 100 mg.
Amp.	Demerol Atropine 2 cc. (Demerol 100 mg.—2 cc.)
Amp.	Demerol Scopolamine 2 cc. (Demerol 100 mg—2 cc.)
Elix.	Demerol (Demerol 50 mg. per 5 cc.)
	Demerol Disp. Syr. 50 mg.—1 cc.
	Demerol Disp. Syr. 75 mg.—1 cc.
	Demerol Disp. Syr. 100 mg.—1 cc.
Tab.	Demerol 50 mg.
Tab.	Demerol 100 mg.
Vial	Demerol 50 mg. per cc.
Vial	Demerol 100 mg. per cc.
Vial	Demerol Scopolamine (Demerol 50 mg. per cc.)
Tab.	Demerol APAP (Demerol 50 mg.)
Tab.	Demerol Comp. (Demerol 25 mg.)
Tab.	Demerol Lotusate (Demerol 100 mg.)
Tab.	Dicodid 5 mg.
Amp.	Dilaudid HCl. 1/32 gr.—1 cc.
Amp.	Dilaudid HCl. 1/20 gr.—1 cc.
Amp.	Dilaudid HCl. 1/16 gr.—1 cc.
Rect. Supp.	Dilaudid HCl. 1/20 gr.
Syr.	Dilaudid (1 mg.—5 cc.)
	Dilaudid HCl. Solutions
H.T.	Dilaudid HCl. 1/64 gr.
H.T.	Dilaudid HCl. 1/32 gr.
H.T.	Dilaudid HCl. 1/20 gr.
H.T.	Dilaudid HCl. 1/16 gr.
Vial	Dilaudid Sulf. 2 mg. per cc.
	Dionin Solutions
Amp.	Dolophine HCl. 10 mg.—1 cc. (Methadone HCl.)
20 cc. Amp.	Dolophine HCl. 10 mg. per cc.
Syr.	Dolophine HCl. (Methadone HCl. 10 mg. per 30 cc.)
Tab.	Dolophine HCl. 5 mg.
Tab.	Dolophine HCl. 7.5 mg.
Tab.	Dolophine HCl. 10 mg.
Tab.	Donnagesic #2 (Codeine Phos. 1½ gr.)
	Dover's Po. N.F. (Po. Ipecac and Opium)
H.T.	H.M.C. #1 (Morphine HBr. ¼ gr.)
H.T.	H.M.C. #2 (Morphine HBr. ⅛ gr.)
	Hycodan Po.
10 cc. Vial	Hymorphan HCl. 2 mg. per cc.
10 cc. Vial	Hymorphan HCl. 2 mg. per cc. Atropine Sulf. 0.25 mg. per cc.
Amp.	Leritine 1 cc., 25 mg. per cc.
Amp.	Leritine 2 cc., 25 mg. per cc.
Tab.	Leritine 25 mg.
30 cc. Vial	Leritine 25 mg. per cc.
Amp.	Levo-Dromoran 2 mg.—1 cc.

Package	Class A Narcotics by Trade Name
Tab.	Levo-Dromoran 2 mg.
10 cc. Vial	Levo-Dromoran 2 mg. per cc.
Tubex	Meperidine HCl. 50 mg.—1 cc.
Tubex	Meperidine HCl. 75 mg.—1 cc.
Tubex M	Meperidine HCl. 100 mg.—1 cc.
Cap.	Mepergan
Cap.	Mepergan Fortis
Tubex	Mepergan 25—50 mg. per 2 cc.
10 cc. Vial	Mepergan 25—25 mg.—1 cc.
Tubex	Mepergan 50—50 mg.—1 cc.
10 cc. Vial	Mepergan 50—50 mg.—1 cc.
100 Tab.	Mercodinone
20 cc. Vial	Methadone HCl. 10 mg. per cc.
30 cc. Vial	Methadone HCl. 10 mg. per cc.
Syr.	Methajade
	Morphine Acetate
Elix.	Morphine HCl. 1 gr. per fl. oz.
	Morphine Solutions
Amp.	Morphine Sulf. ¼ gr. per cc.
Amp.	Morphine Sulf. ¼ gr., Atropine Sulf. 1/150 gr. per cc.
H.T.	Morphine Sulf. ⅛ gr.
H.T.	Morphine Sulf. 1/6 gr.
H.T.	Morphine Sulf. ¼ gr.
H.T.	Morphine Sulf. ½ gr.
H.T.	Morphine Sulf. 1 gr.
H.T.	Morphine Sulf. ¼ gr., Atropine Sulf. 1/150 gr.
T.T.	Morphine Sulf. ¼ gr.
Amp.	Nisentil HCl. 40 mg.—1 cc.
Amp.	Nisentil HCl. 60 mg.—1 cc.
Vial	Nisentil HCl. 60 mg. per cc.
Tab.	Nodalin (Methadone HCl. 2.5 mg.)
Tab.	Nucodan 5 mg.
Amp.	Numorphan HCl. 1 cc. (1.5 mg. per cc.)
Amp.	Numorphan HCl. 2 cc. (1.5 mg. per cc.)
10 cc. Vial	Numorphan HCl. (1.5 mg. per cc.)
Supp.	Numorphan HCl. 2 mg.
Tab.	Numorphan HCl. 10 mg.
Supp.	Numorphan HCl. 5 mg.
	Opium Po.
	Opium Po. Extract
Rect. Supp.	Opium 1 gr. Belladonna ¼ gr.
Tr.	Opium U.S.P. Deod.
	Pantopon All
	Papine
Cap.	Percobarb 5 mg.
Cap.	Percobarb-Demi 2.5 mg.
Tab.	Percodan 5 mg.
Tab.	Percodan-Demi 2.5 mg.
Amp.	Prinadol 2 mg. 1 cc.
10 cc. Vial	Prinadol 2 mg. per cc.
Amp.	Spasmalgin 1 cc. (Pantopon 1/6 gr., Papaverine HCl. 1/3 gr., atropine sulfate 1/60 gr.)
Tab.	Spasmalgin (Pantopon 1/6 gr., Papaverine HCl. 1/3 gr., atropine sulfate 1/60 gr.)

The Four Narcotic Classes

Narcotics are divided in four classifications and are either taxable or exempt, depending upon the addictive quality, strength, form and the presence or absence of other ingredients. Taxable narcotics, **Class A and B,** may be dispensed only upon a prescription order issued by a physician, dentist, veterinarian or other practitioner duly registered under the provisions of the Federal Narcotic Law. Orders from practitioners for other than legitimate medical purposes are not considered valid prescription orders under Federal Law and both the prescriber and the pharmacist may incur criminal penalties for such a violation.

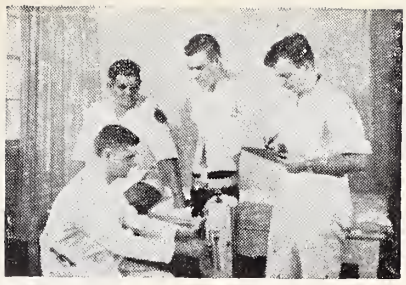
All prescription orders for **Class A Narcotics** must be dated and signed by the prescriber as of the date of issue and, in addition, must contain the full name and address of the patient and the full name, address and narcotic registry number of the prescriber. Narcotic prescription orders should be written in permanent form. Prescription orders for narcotics which have been placed in **Class B** must meet all of the requirements above except the prescriber may transmit his prescription order to the pharmacist orally. The pharmacist must reduce the oral prescription order to writing immediately and include the information required for Class A Narcotics but the prescriber's signature is not necessary.

Renewals of narcotic prescription orders are prohibited, except as to exempt preparations. **Class X preparations** are regulated as to narcotic content and must, in addition,

contain one or more non-narcotic active medicinal ingredients in therapeutic amounts. Class X narcotic preparations may be procured without an official order form. The pharmacist maintains a required record showing the name of the recipient, his address, the name and quantity of the Class X preparation and the date of delivery.

Class M preparations may contain any quantity of the specified drug with either active or inactive non-narcotic ingredients commonly used in medicinal preparations. The pharmacist is not required to maintain a record of dispositions of Class M preparations because such preparations have been found to have little or no additive properties. Examples of narcotic drugs which, when found in combination with non-narcotic ingredients are included in Class M include narcotine, papaverine, narceine and cotarnine. ◄

(Single copies of the brochure "Prescribing and Dispensing Narcotic Drugs—a Reference for the Health Practitioner" are available free from the Indiana Pharmaceutical Association, 54 Monument Circle, Indianapolis, Ind. 46204.)



advanced training for HANGER prosthetists

Certified Prosthetists from the various HANGER offices have attended courses on Upper- and Lower-Extremity Prosthetics ensuring that HANGER Clients receive the best Prosthetic Service possible. The courses are approved by the American Board for Certification and given at the U. of California in Los Angeles, Northwestern U., and at New York U., in cooperation with the Committee on Prosthetics Research and Development of the National Academy of Sciences. The use of the Adjustable Leg, the Patellar-Tendon Bearing Below Knee Prosthesis, and the "quadrilateral socket" were features of a series of intensive courses. The curriculum was centered around the Clinical Team (illustrated) usually composed of a physician, a prosthetist and a therapist and concerned with the integrated handling of each amputee case. Thus, doctors, interested in Prosthetics can be assured that HANGER Prosthetists are fully acquainted with the latest prosthetic methods.

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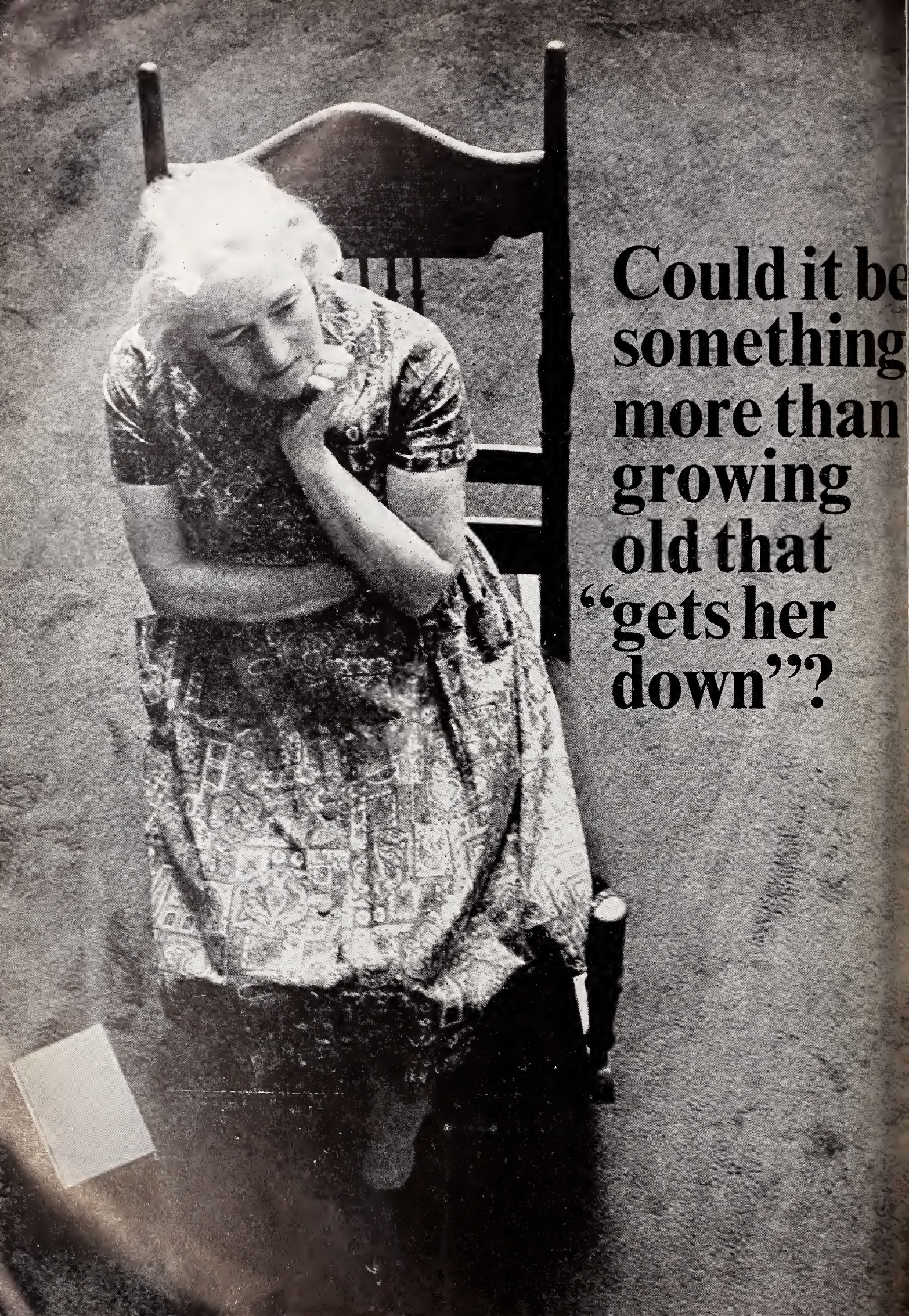
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*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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Deaths of Indiana Physicians in 1966

(M) Member ISMA, (S) Senior Member, (R) Retired

Name	Age	Date of Death	Address	Cause of death
Hamilton, M. Luther (S) (R)	89	Jan. 13	Newberry	Cardiac failure. Cardiac decompensation. Uremia.
Clark, M. Eugene (M)	65	Jan. 15	Cambridge City	Coronary occlusion.
Lybrook, Daniel E. (S) (R)	81	Jan. 19	Young America	Acute congestive cardiac failure. Chronic emphysema.
Whisler, Frederick M. (S) (R)	76	Jan. 24	Wabash	Carcinomatosis. Pulmonary carcinoma.
Hoppenrath, William H. (S) (R)	95	Jan. 26	Elwood	Nephrosclerosis. Generalized arteriosclerosis.
Jimenez, Liberato E.	65	Jan. 26	Terre Haute	Cerebral thrombosis. Acute pulmonary edema.
Duemling, Arnold H. (M) (R)	64	Jan. 26	Ft. Wayne	Bronchopneumonia. Encephalomacia of frontal and parietal lobes.
Woods, William P. (S) (R)	88	Jan. 28	Evansville	Cerebral arteriosclerosis. Bronchopneumonia.
Carneal, Thomas E. (S) (R)	80	Jan. 30	Winamac	Generalized metastatic carcinoma.
Johnson, Lowell R. (M)	52	Jan. 30	West Lafayette	Carcinoma of the lung with metastases.
Cacia, John J. (M)	59	Feb. 1	Evansville	Acute myocardial infarction.
McClelland, Donald C. (S) (R)	78	Feb. 2	Lafayette	Carcinoma of the bladder with metastases. Pulmonary emphysema.
Sargent, Wallace B. (M)	63	Feb. 6	Russellville, Ala. (formerly Hammond)	Arteriosclerotic heart disease with myocardial insufficiency.
Brock, Earl E. (S) (R)	80	Feb. 14	Anderson	Cerebrovascular hemorrhage. Generalized arteriosclerosis.
Emenhiser, John L. (M)	70	Mar. 8	Ft. Wayne	Bronchopneumonia. Cardiovascular disease.
Stiles, William J. (M)	46	Mar. 18	Madison	Cardiac arrest. Digitalis intoxication.
Wilson, Paul E. (S)	78	Mar. 19	Boonville	Acute enteritis.
Lamey, James L. (M)	57	Mar. 22	Anderson	Jakob-Creutzfeldt disease.
Reisler, Simon (S) (R)	78	Mar. 24	Indianapolis	Coronary artery disease.
Cartwright, Emor L. (S) (R)	78	Mar. 24	Ft. Wayne	Myocardial insufficiency.
Deems, Myers B. (M)	59	Mar. 26	Evansville	Coronary occlusion with ventricular fibrillation.
Engle, Russell B. (M) (R)	68	Apr. 3	Winchester	Uremia. Hypertensive cardiovascular renal disease.
Turner, Oscar A. (S) (R)	80	Apr. 10	Madison	Cerebral infarction.
Gante, Henry W. (S) (R)	80	Apr. 18	Anderson	Bronchopneumonia. Aspiration of emesis.
Quickel, Daniel S. (S) (R)	98	Apr. 19	Anderson	Gangrene. Acute myocarditis.
Nelson, Paul L.	61	Apr. 19	Anderson	Cirrhosis of liver.
Cullen, Paul K. (M)	63	Apr. 21	Indianapolis	Carcinoma of the lung.
Burress, Clyde R. (M)	37	Apr. 25	Evansville	Acute leukemia.
Clark, Joseph H. (M)	55	Apr. 27	Huntington	Coronary heart disease.
Skillern, Penn G. (S) (R)	84	May 6	South Bend	Squamous cell carcinoma of the bronchus.
Ferry, Paul W. (S)	73	May 9	Kokomo	Internal carotid artery thrombosis.
Hall, Wesley M.	85	May 13	Rising Sun	Internal hemorrhage. Esophageal varices. Posthepatic cirrhosis.
Dukes, David A. (M)	68	May 17	Tell City	Acute stem-cell leukemia.
Bolman, Ralph M. (M)	50	May 20	Ft. Wayne	Reticulem-cell lymphoma.
Elledge, Ray (S) (R)	72	May 23	Hammond	Uremia. Metastatic carcinoma of the prostate.
DeTar, George B. (S)	95	June 1	Fort Myers, Fla. (formerly Winslow, Ind.)	Generalized arteriosclerosis.
Grayston, Wallace S. (S) (R)	87	June 13	Huntington	Acute dilatation of the heart. Chronic myocarditis.
Beverland, M. E. (S)	84	June 14	Indianapolis	Cerebral thrombosis.
Shellhouse, Michael (M)	63	June 19	Gary	Uremia. Acute glomerulonephritis.
Hall, Frank M. (M)	69	June 24	Indianapolis	Cardiovascular collapse. Arteriosclerotic vascular disease.

Name	Age	Date of Death	Address	Cause of death
White, Chester S. (S) (R)	85	June 28	Paris, Ill. (formerly Rosedale)	Cerebral hemorrhage.
Fickas, Dallas (M)	57	July 3	Evansville	Pulmonary congestion due to left ventricular failure.
Allen, L. Howard (M)	67	July 9	Bedford	Coronary occlusion.
Smith, S. Joseph (M)	50	July 12	Vincennes	Myocardial infarction.
Benedict, Charles D. (M)	44	July 14	LaGrange	Coronary occlusion.
Eisterhold, John A. (M)	54	July 15	Evansville	Amyotropic lateral sclerosis.
Lawson, I. H. (S) (R)	81	July 17	Kendallville	Cerebral arteriosclerosis.
Vurpillat, Francis J. (M)	69	July 21	South Bend	Myocardial infarction.
Kelly, Frank H. (S) (R)	86	July 23	Argos	Subdural hemorrhage due to automobile accident.
Brazelton, Osborne T. (S) (R)	79	Aug. 3	Seal Beach, Calif. (formerly Princeton)	Carcinoma of the urinary bladder.
Walker, James L. (S) (R)	78	Aug. 3	LaFontaine	Arteriosclerotic heart disease. Diabetes mellitus.
Grangier, Bernard (M)	37	Aug. 4	Columbus	Overdose of barbiturates.
Storey, Alfred A.	71	Aug. 4	Indianapolis	Uremia.
Paskind, Jacob (M)	73	Aug. 14	Indianapolis	Pneumonia. Pulmonary embolism. Generalized metastatic disease.
Davis, Lloyd H. (S)	77	Aug. 18	Shoreham, Vt. (formerly Crawfordsville)	Arteriosclerotic heart disease.
Newland, Arthur E.	72	Aug. 27	Bedford	Myocardial infarction. Coronary artery disease.
Gibbs, Charles M. (S) (R)	93	Aug. 31	Greenfield	Cerebrovascular shock. Pneumonia.
McArdle, Edward G. (M)	55	Sept. 6	Ft. Wayne	Hepatic failure. Upper gastrointestinal hemorrhage.
Rudolph, Franklin G. (M)	51	Sept. 10	Hammond	Myocardial infarction.
Kirklin, Oren L. (M)	63	Sept. 16	Indianapolis	Bleeding duodenal ulcer. Hypostatic pneumonia.
Davis, Joseph C.	68	Sept. 25	Muncie	Carcinoma of the prostate with metastases.
Turner, Jack J. (M)	45	Oct. 4	Bloomfield	Myocardial infarction.
Inlow, Herbert H. (M)	66	Oct. 8	Shelbyville	Lobar pneumonia, complicated by pulmonary emphysema.
White, James V. (M)	54	Oct. 9	Terre Haute	Carcinoma of the colon with metastases.
Reilly, Eva F. (M)	46	Oct. 17	Indianapolis	Subarachnoid hemorrhage. Berry aneurysm of anterior communicating artery.
Richardson, Charles L. (M)	63	Nov. 3	Rochester	Pulmonary emphysema. Cor pulmonale.
Martin, Charles E. (S) (R)	80	Nov. 4	Lynn	Cerebral hemorrhage. Hypertension. Arteriosclerosis.
Hansell, Robert M. (M)	53	Nov. 6	Indianapolis	Mediastinal carcinoma with metastases.
James, Nicholas A. (S) (R)	83	Nov. 12	Tell City	Cerebrovascular thrombosis. Cerebral arteriosclerosis.
Porter, John R.	73	Nov. 17	Lebanon	Uremia. Chronic lymphatic leukemia.
Holland, Deward J. (S) (R)	87	Nov. 24	Bloomington	Coronary occlusion. Arteriosclerosis.
Keiser, Venice D. (S) (R)	73	Nov. 26	Indianapolis	Heart failure. Arteriosclerotic pulmonary emphysema. Heart disease.
Rigley, Edward L. (M)	64	Nov. 26	South Bend	Carcinoma of the larynx.
Asher, Ernest O. (S)	80	Dec. 3	Indianapolis	Myocardial infarction. Coronary arteriosclerosis.
Strong, Daniel S. (S) (R)	88	Dec. 7	Terre Haute	Carcinoma of the prostate.
Osterman, Louis H. (S) (R)	72	Dec. 12	Seymour	Cerebral embolism. Myocardial infarction.
Canaday, James W. (S) (R)	91	Dec. 15	Indianapolis	Uremia. Cerebrovascular renal disease.
Miller, Milo K. (S) (R)	75	Dec. 16	Marianna, Fla. (formerly South Bend)	Dissecting aneurysm of the aorta.
Miller, Ebbo H. (S)	75	Dec. 20	Valparaiso	Pulmonary embolism. Diverticululitis, sigmoid colon.
Smith, William M. (M)	71	Dec. 23	LaPorte	Coronary thrombosis. Arteriosclerotic heart disease.
Rhorer, Herbert M. (S) (R)	75	Dec. 26	Sarasota, Fla. (formerly Kokomo)	Myocardial infarction. Thrombosis of coronary artery. Atherosclerosis.
Marcus, Emanuel (M)	51	Dec. 28	Hammond	Coronary thrombosis.

Presidents of ISMA Since Its Organization

Medical Convention	Elected	Served
*Livingston Dunlap, Indianapolis	1849	1849
Medical Society		
*William T. S. Cornett, Versailles	1849	1850
*Ashahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbot Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Ft. Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	----
*John Moffet (acting), Rushville	1863	1864
*Samuel L. Linton, Columbus	1864	----
*Wilson Lockhart (acting), Danville	1864	1865
*Myron H. Harding, Lawrenceburg	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert N. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Ft. Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselberry, Evansville	1873	----
*Wilson Hobbs (acting), Knightstown	1873	1874
*Richard E. Houghton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	----
*Benj. Newland (acting), Bedford (v.p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Mumford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Ft. Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	----
*Charles S. Bond (acting), Richmond	1894	1895
*Miles F. Porter, Ft. Wayne	1895	1896

* Deceased.

Medical Society	Elected	Served
*James H. Ford, Wabash	1896	1897
*William N. Wishard, Indianapolis	1897	1898
*John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Ft. Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
*John B. Berteling, South Bend	1902	1903
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederick C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
*Joseph Rilus Eastman, Indianapolis	1917	1918
*William H. Stemm, North Vernon	1918	1919
*Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
*William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
*Eldridge M. Shanklin, Hammond	1924	1925
Medical Association		
*Charles N. Combs, Terre Haute	1925	1926
*Frank W. Cregor, Indianapolis	1926	1927
*George R. Daniels, Marion	1926	1928
*Charles E. Gillespie, Seymour	1927	1929
*Angus C. McDonald, Warsaw	1928	1930
*Alois B. Graham, Indianapolis	1929	1931
Franklin S. Crockett, Lafayette	1930	1932
*Joseph H. Weinstein, Terre Haute	1931	1933
*Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
*Roscoe L. Sensenich, South Bend	1934	1936
*Edmund D. Clark, Indianapolis	1935	1937
Herman M. Baker, Evansville	1936	1938
*Edmund M. Van Buskirk, Ft. Wayne	1937	1939
Karl R. Ruddell, Indianapolis	1938	1940
*Albert M. Mitchell, Terre Haute	1939	1941
Maynard A. Austin, Anderson	1940	1942
*Carl H. McCaskey, Indianapolis	1941	1943
*Jacob T. Oliphant, Farmerburg	1942	1944
*Nelson K. Forster, Hammond	1943	1945
*Jesse E. Ferrell, Fortville	1944	1946
*Floyd T. Romberger, Lafayette	1945	1947
*Cleon A. Nafe, Indianapolis	1946	1948
*Augustus P. Hauss, New Albany	1947	1949
*C. S. Black, Warren	1948	1950
*Alfred Ellison, South Bend	1949	1951

ISMA PRESIDENTS

Medical Association	Elected	Continued Served
*J. William Wright, Indianapolis	1950	1952
Paul D. Crimm, Evansville	1951	1953
Wm. Harry Howard, Hammond	1952	1954
*Walter L. Portteus, Franklin	1953	1955
Walter U. Kennedy, New Castle	1954	1956
*Elton R. Clarke, Kokomo	1955	1957
M. C. Topping, Terre Haute	1956	1958
Kenneth L. Olson, South Bend	1957	1959
Earl W. Mericle, Indianapolis	1958	1960
Guy A. Owsley, Hartford City	1959	1961
*Harry R. Stimson, Gary	1960	1962
Maurice E. Glock	1961	1963
Donald E. Wood	1962	1964
Joseph M. Black	1963	1965
Kenneth O. Neumann	1964	1966

* Deceased.

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Constitution and Bylaws of the Indiana State Medical Association

CONSTITUTION

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II.—PURPOSE OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education; to promote friendly intercourse among physicians; to protect its members against imposition; and to enlighten and direct public opinion in regard to the great problems of medical care, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1.—This Association shall consist of Active Members, Associate Members, Senior Members and Honorary Members.

Sec. 2.—*Active Members.*—The active members of this Association shall be the members of the component county medical societies, and no county medical society shall grant active membership therein on a basis that does not include membership in the Indiana State Medical Association.

Sec. 3.—*Associate Members.*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

Sec. 4.—*Senior Members.*—Senior members shall be physicians of the State of Indiana who have attained the age of seventy years and have held membership in the Indiana State Medical Association for twenty years or more, and who, upon their application, have been certified to the Executive Secretary as eligible for such membership by the county societies of which they are members. Eligibility to senior status shall begin the year after the member reaches the age of seventy.

Sec. 5.—*Honorary Members.*—Honorary members shall consist of teachers, scientists and others who have rendered highly meritorious service to the profession of medicine, and of physicians and surgeons of distinction, upon whom the Association may, through vote of the House of Delegates, desire to confer such membership as a special honor.

Sec. 6.—*Rights and Privileges of Members.*—Active members and senior members shall have the same rights and privileges except as follows:

a. Senior members shall not be required to pay membership dues in the State Association.

b. If senior members desire to receive THE JOURNAL of the State Association, they shall pay the regular subscription price therefor.

c. Senior members who desire the benefit of medical defense as provided by the Bylaws of this Association shall pay the amount stipulated in Section 1, Chapter XXIX of the Bylaws for this coverage.

d. Honorary members hereafter elected shall hold such membership as an honor and distinction and shall have the right to attend meetings of the Association. They shall have the privilege of participating in discussions but shall have no right to vote or to hold office. They shall not be required to pay membership dues in the State Association.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates, or their designated alternates, elected by the component county societies; (2) the Councilors, or their designated alternates, and (3) the ex-presidents of the Indiana State Medical Association. The following shall be *ex officio* members: the President, the President-elect, the Executive Secretary, the Treasurer and Assistant Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President or person presiding shall cast the deciding vote.

ARTICLE VI.—COUNCIL

The Council shall consist of (1) the Councilors with power to vote, and their duly elected alternates, each of the latter without power to vote, except in the absence of his Councilor; and (2) *ex officio* the President, President-elect, Treasurer with power to vote and Assistant Treasurer without power to vote except in case the Treasurer be absent. Besides its duties mentioned in the Bylaws, it shall constitute the Board of

Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the By-laws, and at all times shall be the finance committee of the Association. Seven Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections; and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies. Councilor districts shall be defined by the House of Delegates.

ARTICLE VIII.—CONVENTION AND MEETINGS

Section 1.—The Association shall hold an Annual Convention during which there shall be held such general and section meetings as the Association through its duly constituted officers and committees may provide for.

Sec. 2.—The House of Delegates shall select the place five years in advance for holding the Annual Convention. The time for the convention shall be fixed by the Council, and the Council shall have the power also to change the place for holding the convention where conditions may create difficulties in holding a successful convention at the place designated by the House of Delegates.

Sec. 3.—Special meetings of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members. Upon receipt by the president of such a petition of twenty delegates, or fifty members, the president shall within 30 days thereafter issue a call for such special meeting at a time and place to be fixed by the president. The president, in specifying the time of such special meeting, shall fix the same as soon thereafter as reasonable and suitable arrangements can be made.

ARTICLE IX.—OFFICERS

Section 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, an Assistant Treasurer and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

Sec. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. No Councilor shall be eligible to serve longer than two consecutive three-year terms, effective with the beginning of his next election following the adoption of this amendment.

All of these officers shall serve until their successors are elected and installed. Provided, that if any elected Councilor fails, without reason acceptable to the Council, in any one calendar year to attend a majority of the meetings of the Council, he shall thereby cease to be a Councilor, and the Executive Secretary shall thereupon take action in accordance with Section 4 of this article.

Sec. 3.—The officers of this Association with the exception of the Executive Secretary shall be elected by the House of Delegates as the first order of business at the final meeting of the House of Delegates, and no person shall be elected to any such office who has not been an active member of the Association for the preceding two years.

Sec. 4.—The Councilors shall be elected by the respective district societies. If any district fails to meet and elect its Councilor by the time of expiration of the incumbent's term of office, the Executive Secretary of the Association shall cause a special meeting to be called by said district society for the purpose of such election.

Sec. 5.—Each Councilor district shall elect an alternate Councilor whose term of office shall be the same as the Councilor, namely three years. The alternate Councilor shall be elected in a year during which there is no Councilor elected.

The duties of the alternate Councilor shall be:

1. To represent the Councilor district in the absence of the regularly elected Councilor.

2. To vote only in the absence of the regularly elected Councilor either in the House of Delegates or in Council meetings where he represents the regularly elected Councilor.

Sec. 6.—Any officer may be removed from office after a hearing before the Council, on thirty days' notice, on charges in writing, upon a vote of three-fourths of the members of the Council.

Sec. 7.—In event of the death, resignation, removal, or disability of the President, the President-elect shall succeed to the presidency. In the event of the death, disability, resignation or removal of both the President and the President-elect, the chairman of the Council shall become President pro tem and as such shall, within a period of sixty days, call a special session of the members of the House of Delegates for the purpose of electing members to fill these vacancies, who shall serve until the next regular meeting of the House of Delegates, at which time both a President and a President-elect shall be elected, both of whom shall take office immediately upon their election.

Sec. 8.—A vacancy in the office of Treasurer or Assistant Treasurer shall be filled by an election by the Councilors at the next regular meeting of the Council following the occurrence of such vacancy.

Sec. 9.—In the event of a vacancy occurring from any cause, except expiration of the term of office, in the office of any district councilor, the duly elected alternate councilor from the same district shall succeed to the office of councilor in that district for the unexpired term of said councilor.

In the event vacancies occur in any councilor district in the offices of both councilor and alternate councilor, the vacancies shall be filled by an election by the members of the association within the councilor district in which such vacancies occur. A call for such elections shall be issued by the Executive Secretary of the State Association following conference with the officers of the district organization. The call shall state the time and place of holding the election and shall be sent registered mail to the county secretary as filed in the State secretary's office of each component society within the district. Such call shall be mailed within ten days after the State secretary has learned of the vacancies. The election may be held at a special or regular meeting in which other business than the election may be transacted. Such election shall be held within fifteen days after the secretary of the State Association shall have mailed such call.

Sec. 10.—None of the officers shall receive compensation except the Executive Secretary, who shall be employed by the Council, and the Council shall fill any vacancy in that office.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship, this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—INCOME AND EXPENSES

Funds for carrying on the activities of this Association shall be raised by the following means:

a. Membership dues to be collected by the component county societies in connection with the dues for such component societies. The amount of the dues of each component society shall be fixed by the society itself; and the amount of dues for this Association shall be fixed from time to time by the House of Delegates.

b. Voluntary contributions.

c. Revenues derived from the Association's publications.

d. Any other manner approved by the House of Delegates.

Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Executive Committee and Council for approval before final action is taken thereon.

ARTICLE XII.—REFERENDUM

Section 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Convention, provided that such amendment shall have been presented in open meeting at the previous Annual Convention, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BYLAWS

CHAPTER I.—MEMBERSHIP

Sec. 1.—Every county society shall include by January 1, 1967, as a part of their Constitution or Bylaws the following: Every person becoming an active member after January 1, 1967, shall occupy a provisional status for two years immediately following his admission to membership in this society, during which period he must successfully complete an orientation course to be presented at stated intervals by the Council of the Indiana State Medical Association or one of its commissions. The form and content of this course shall be prescribed by the Council of Indiana State Medical Association. Unless excused by the said Council for good cause shown, failure to attend and successfully complete the course within the two-year period shall automatically revoke the delinquent's membership and terminate all of his rights and privileges as a member, and he shall thereafter, for a period of one year, be ineligible for membership in any component county society.

Sec. 2.—The term "Member" as used in these Bylaws unless otherwise indicated shall mean both active and senior members of component county medical societies who hold either the Degree of Doctor of Medicine or Bachelor of Medicine.

Sec. 3.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a

member in good standing of the Indiana State Medical Association, provided, however, that he is a citizen of the United States of America, or has filed his declaration of intention of becoming a citizen and his first citizenship papers are in full force and effect.

Sec. 4.—No person whose license to practice medicine has been suspended or revoked or who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this association or of a component county society, nor shall he be permitted to take part in any of their proceedings until he has been relieved of such disability.

Sec. 5.—Each member in attendance at the Annual Convention shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that convention. No member shall take part in any of the proceedings of an Annual Convention until he has complied with the provisions of this section.

CHAPTER II.—GENERAL MEETINGS

Section 1.—General Meetings shall mean all meetings planned for attendance by all registered members, and shall include those meetings in which guests of registered members or the general public are also invited. The address of the President may be delivered in a General Meeting, and the programs of General Meetings shall be arranged by the Executive Committee except where scientific papers are included, in which event the scientific part of the program shall be arranged by the Commission on Convention Arrangements, with the sanction and approval of the officers.

Sec. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Sec. 3.—All scientific papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each such paper shall be deposited with the Executive Secretary when read.

Sec. 4.—The Council shall appropriate from the funds of the Association for such an amount as in the discretion of the Council shall be reasonably needed for that purpose, and no commitments shall be made for expenses in excess of the amount appropriated for such Convention. The funds so appropriated shall, upon the approval of the Executive Committee, be expended at the direction of the Commission on Convention Arrangements appointed by the President for the Convention for which the appropriation is made. All money in excess of that expended for actual expenses incurred shall revert each year to the treasury of the Association.

CHAPTER III.—SECTIONS

Section 1.—During the Annual Convention the Association in addition to the general meetings may hold the following section meetings:

a. Surgical.
b. Internal Medicine.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. General Practice.
f. Obstetrics and Gynecology.
g. Preventive Medicine and Public Health.
h. Radiology.
i. Nervous and Mental Diseases.
j. Pathology.
k. Pediatrics.
l. Any other sections that hereafter may be provided for by the House of Delegates.

Sec. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Sec. 3.—The election of officers of the sections shall be the last order of business of the last meeting of the sections during the Annual Convention.

Sec. 4.—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV.—HOUSE OF DELEGATES

Section 1.—The House of Delegates may meet on the day before the date set for the beginning of the general registration of the attendance at the Annual Convention. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the last day of the Annual Convention for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

Sec. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but, irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and Bylaws, shall be entitled to one delegate, except that where a component society is made up of physicians of more than one county, each county shall be entitled to at least one delegate and one alternate delegate who shall be a resident of the county he represents as a delegate or alternate delegate and who shall be selected by the physicians residing in such county.

The number of Delegates to which each Component Society is entitled shall be based upon the number of members on record in the office of the Executive Secretary in good standing with current dues fully paid as of December 31 of the preceding year.

The names of duly elected delegates and alternates from each component society shall be sent

to the Executive Secretary of this Association on or before February first prior to the Annual Convention at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the secretary of his county society, be presented to the Committee on Credentials at the time of the Annual Convention.

Sec. 3.—Fifty delegates shall constitute a quorum.

Sec. 4.—The House of Delegates shall:

a. Elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

b. Divide the State into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

c. Have authority to appoint committees for special purposes from among members of the Association who need not be members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

d. Approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 5.—Proposals calling for appropriations of funds by the House of Delegates shall be submitted to the Executive Committee and the Council for their recommendation before final action of the House.

Sec. 6.—At the first meeting the President shall announce the membership of the reference committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

Sec. 7.—All resolutions to be presented to the House of Delegates for action shall be prepared and mailed to the Executive Secretary of the Association so that he will receive them not later than forty-five days prior to the meeting of the House of Delegates to which the resolutions will be presented for action.

Provided, that where a resolution has been first submitted to the Committee on Rules and Order of Business together with a written statement setting forth the reasons why said resolution was not mailed to the Executive Secretary more than 45 days prior to the meeting of the House of Delegates and also setting forth in said written statement the reason why said resolution is of such an emergency nature that it cannot wait until the next meeting of the House, and that said Committee on Rules and Order of Business has approved said resolution for submission to the House, and that each delegate shall be furnished a copy before the next meeting of the House, then this subsection of the Bylaws may be suspended with respect to said resolution upon a two-thirds vote of the House of Delegates.

Sec. 8.—The final vote on any issue calling for changes in dues or in dues structure shall be by roll call vote. Each member's vote shall be permanently recorded and no suspension of this rule will be allowed on the final vote of such an issue.

CHAPTER V.—ELECTION OF OFFICERS

Section 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the last day of the Annual Convention.

Sec. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

Sec. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

Sec. 4.—The President, President-elect, Treasurer and Assistant Treasurer shall serve from the termination of the annual meeting of the House of Delegates in which the President-elect, Treasurer and Assistant Treasurer are elected until the termination of the succeeding annual meeting of the House of Delegates.

Sec. 5.—The officers of the Association shall be installed by taking the following oath of office: I, _____, solemnly swear that I shall carry out to the best of my ability, the duties of the office of the Indiana State Medical Association to which I have been elected.

I shall strive constantly to maintain the ethics of the medical profession and to promote the public health and welfare. I shall dedicate myself and my office to improving the health standards of the American people and to do the task of bringing increasingly improved medical care within the reach of every citizen.

I shall uphold the Constitution of the United States of America and of the State of Indiana, the Constitution and Bylaws of the American Medical Association and the Constitution and Bylaws of the Indiana State Medical Association at all times.

I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans. To these duties and obligations, I pledge myself, so help me God.

CHAPTER VI.—DUTIES OF OFFICERS

Section 1.—The president, or a member designated by him, shall preside at all general meetings of the Association and of the House of Delegates. The President shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Executive Committee, and shall perform such other duties as custom and parlia-

mentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2.—The President-elect's term of office shall be for one year, at the completion of which he succeeds to the presidency. While President-elect, he shall assist the President in the discharge of his duties.

Sec. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall receive all bequests and donations to the Association and shall demand and receive all funds due the Association except accounts due THE JOURNAL in the conduct of its business. The funds of the Association shall be deposited in a depository or depositories designated by the Executive Committee, and withdrawals from such funds shall be made on checks or drafts signed by the Treasurer and the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to an annual audit by a Certified Public Accountant.

The Assistant Treasurer shall give bond at the expense of the Association in such amount as shall be required by the Council unless he is included in the coverage of a blanket or position bond. In case of death, or incapacity of the Treasurer, he shall succeed to all the duties and rights of the Treasurer until a new Treasurer be elected. In the absence of the Treasurer, he shall attend to the duties and rights of the Treasurer during such absence and he shall also perform such duties of the Treasurer as may be delegated and assigned to him by the Treasurer.

Sec. 4.—The Executive Secretary shall be the directing manager of the Association's headquarters and JOURNAL offices, and shall supervise the work of all salaried employees in the Association offices. Such supervision shall be subject to directives from the House of Delegates, the Council, the Executive Committee, and the President of the Association. He shall discharge the administrative functions of the Association not within the duties of other officers or of committees to perform. He shall assist, at their request, all officers and committees, and shall keep himself informed in regard to non-professional matters affecting the medical profession, for the purpose of keeping himself qualified to perform the services herein mentioned. He shall be responsible for the execution and carrying out of the policies of the Association and in that connection shall perform all specific tasks committed to him by the committees, the Council, and the officers of this Association. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

Sec. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed shall be allowed for in the budget, but excepting the Executive Secretary, this shall not include the expenses of attending the Annual Convention.

CHAPTER VII.—COUNCIL

Section 1.—The Council shall meet as follows: 1. January, April, and July of each year on dates and at places fixed by the Council. 2. On the day preceding the first day for the scientific meetings of the Annual Convention of the Association. 3. On the last day of the Annual Convention of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman, and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. It shall organize itself at the meeting following the final session of the House of Delegates by electing its chairman who shall serve for one year. The chairman of the Council shall be elected by secret ballot. The number of terms of the chairman shall be limited to not more than three in succession.

Terms of Councilors shall begin with the first meeting of the Council following the final session of the House of Delegates at the Annual Session.

Sec. 2.—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual Convention. The House of Delegates may take such action, if any, as it deems appropriate upon such reports. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Convention of the Association.

Sec. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Convention a stepping stone to future ones of higher interest.

Sec. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 5.—The Council shall make careful inquiry

into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

Sec. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and Bylaws.

Sec. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 9.—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Convention and be published in the number of THE JOURNAL which immediately precedes the Annual Convention.

Sec. 11.—In the interim between the meetings of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

Sec. 12.—The Council shall at its meeting following the close of the House of Delegates elect two members of the Association, at large, or of the Council, who, with the President, the President-elect, the Treasurer, and the Chairman of the Council, shall constitute and be known as the Executive Committee. If such members of the Executive Committee be not members of the Council they shall not have the power of vote in the Council.

CHAPTER VIII.—ORGANIZATION OF ACTIVITIES AND RESPONSIBILITIES

Section 1.—The work of the Association, the performance of which is not provided for elsewhere in the Constitution or Bylaws, and is not carried on in the meetings of the Council or of the House of Delegates, or by Special Committees created by the Executive Committee, the Council, or the House of Delegates, shall be performed by the following standing committees and commissions:

The Executive Committee
The Grievance Committee
The Student Loan Committee
The Medical-Legal Review Committee
The Future Planning Committee
The Commission on Convention Arrangements
The Commission on Constitution and Bylaws
The Commission on Legislation
The Commission on Public Information
The Commission on Governmental Medical Services
The Commission on Public Health
The Commission on Voluntary Health Agencies
The Commission on Medical Economics and Insurance
The Commission on Inter-Professional Relations
The Commission on Medical Education and Licensure
The Commission on Special Activities
The Commission on the Aged and Aging

The difference between committees and commissions is shown in the provision of these Bylaws pertaining to their work and composition.

Sec. 2.—Unless otherwise provided in these Bylaws, the committees shall be appointed by the President with the chairman of each committee designated by him, and the number constituting each committee shall be as indicated in the section of these Bylaws pertaining to each particular committee.

Sec. 3.—Each commission will consist of fifteen members appointed by the President, with at least one member from each councilor district. The original appointees in each commission shall be divided into three groups by lot. The first group shall serve three years; the second, two years; and the third, one year. Thereafter, each incoming President shall appoint five members of each commission to fill the vacancies resulting from the expiration of the terms of members, and such appointments shall be for three years. The President shall also appoint members to fill the unexpired term where any vacancy occurs through death, resignation or otherwise.

Sec. 4.—The President shall have the power, with the approval of the Council, to remove any member of any committee or commission where such member, for any reason, does not or cannot work at attempting to perform the duties pertaining to membership on such committee or commission.

Sec. 5.—Unless otherwise provided in these Bylaws, no member of either a committee or a commission shall serve on the same committee or commission more than two consecutive terms, but this shall not prevent him serving more than two terms if the term of another member intervenes. The time given to the serving of an unexpired term shall not be considered in determining the period within which a member may serve consecutively.

Sec. 6.—Within sixty days after the meeting of the State Convention, the President will call all commissions and committees into a joint meeting in which he will give a statement of the duties and responsibilities of all committees and commissions, call special attention to any immediate problems confronting the Association, and assign such problems or parts thereof to appropriate committees and commissions. Then this joint meeting will divide into meetings of the separate commissions, at which time the commissions and committees will organize by the election of chairman, vice-chairman and secretary, unless otherwise provided for in these Bylaws. In these meetings the commissions may provide for such subcommittees within the separate commissions as they may deem advisable. Each committee or commission shall have the right to call upon other committees, commissions or members of the profession for counsel and advice with respect to its work.

Sec. 7.—Each committee and commission shall have the privilege and is encouraged to have joint meetings with any like committee or commission of the Auxiliary where such like committee or commission exists, for the purpose of coordinating their activities to make them more effective in the medical service of the public and the intent of the Association.

Sec. 8.—Each committee and commission shall have the duty and responsibility of keeping constantly and currently informed on the matters within the area of its special interest and activity; of studying the conditions within that area with the purpose of finding possibilities of improvement; of finding the best solutions it can to the specific problems referred to it; of contributing in its area to the achievements of the Association as a whole in the protection and improvement of the health of the whole human family and finally of making all its efforts useful by passing on to the Association in the most effective manner possible the results of its studies and activities in its own area of special interests.

Sec. 9.—The President and Executive Secretary shall be *ex officio* members of all the foregoing committees and commissions without voting rights where their inclusion on the committee or commission is not otherwise provided for in these Bylaws.

CHAPTER IX.—THE EXECUTIVE COMMITTEE

Section 1.—The Executive Committee, constituted as provided in Section 12 of Chapter VII of these Bylaws, shall hold its first meeting immediately following the meeting of the Council held at the close of the last meeting of the House of Delegates in the Annual Convention, and shall organize by electing its chairman. Its secretary shall be the Executive Secretary of the Association. It shall meet with the Executive Secretary on the call of the Chairman, or of any three members, to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall have all jurisdiction with respect to medical defense activities of the Association and shall be governed by the rules it adopts concerning that activity and by the Bylaws of this Association. It shall make decisions for the Association, including matters pertaining to THE JOURNAL, during the intervals between the meetings of the Council, and shall report its actions to the Council.

Sec. 2.—It shall prepare a budget for the ensuing fiscal year; and all expenditures of the Association, except those otherwise provided for under the Constitution and Bylaws, shall be governed by the budget. No expense not provided for in the budget or otherwise under the Constitution and Bylaws shall be incurred by any officer, commission or committee. A committee, commission or officer may submit a request for funds to meet unusual expenses not included in the annual budget, and the Executive Committee shall have the power, by a two-thirds vote, to amend the budget to provide such funds.

CHAPTER X.—THE GRIEVANCE COMMITTEE

Section 1.—The Grievance Committee shall be composed of nine physicians, three of whom may be past presidents of the Association, and all of whom shall be appointed by the President. Not more than two physicians shall be appointed from any one councilor district. No member shall hold any elective office in the State Association during tenure on this committee. Of the nine physicians first appointed, three shall serve for a period of one year; three for two years; and three for three years. Thereafter, three shall be appointed each year for a three-year term to fill the vacancies caused by the expiration of terms. Any vacancy occurring in this committee, other than by expiration of term, shall be filled by an interim appointee to serve the balance of the unexpired term. This committee shall organize itself by electing a chairman, a vice-chairman and a secretary.

Sec. 2.—This provision regarding the constitution of the Grievance Committee shall be construed to mean that the present committee of that name is continued in that position with the terms of its members expiring and new members to be appointed on the basis of this provision being operative and effective as of the dates of their respective original appointments; and it is not to be construed as having the effect of creating a new committee, all of whose members are to be appointed upon this amendment being adopted and becoming effective.

Sec. 3.—In addition to the above provided organization and membership of the committee, the Presi-

dent of the Association shall appoint an accredited psychiatrist as a consultant for the committee, whose tenure of office shall be on an annual basis. The appointment of the psychiatrist may be made from any councilor district of the Association, irrespective of the membership of the committee including another member or members from the same councilor district. He shall have the same rights and privileges as other members of the committee except that he shall not have the right to vote.

Sec. 4.—The duties of this committee shall be to receive complaints, appeals or suggestions from physicians or laymen concerning professional conduct. It shall attempt to find the facts regarding any matter brought to its attention, through procedures proper and appropriate to that end, and shall attempt to adjust differences between patients and physicians, and between physicians. It may, if it believes the facts justify such action cite a member of the Association to the Council of the State Association. It shall, subject to the approval of the Council, draw up a set of rules and regulations governing its procedure and official actions.

CHAPTER XI.—THE COMMISSION ON CONVENTION ARRANGEMENTS

Section 1.—The Commission on Convention Arrangements, with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and technical exhibits, and in conjunction with the Executive Secretary, shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official programs, and shall make additional announcements during the session as occasion may require. The arrangements and the character of any and all technical exhibits must meet with the approval of the Executive Committee of the Association.

Sec. 2.—It shall, with the approval of the Executive Committee, prepare a program for scientific work for the annual convention in which shall be included the respective programs for section meetings which shall be prepared through cooperation with the officers of the various sections; and it shall, with the approval of the Executive Committee, arrange for scientific exhibits as a part of the Annual Convention.

Sec. 3.—The general, scientific and sectional programs, and the financial arrangements to provide for them must be approved by the Executive Committee before being officially announced.

CHAPTER XII.—THE STUDENT LOAN COMMITTEE

Section 1.—The Student Loan Committee shall be constituted as follows:

(a) The President of Indiana State Medical Association

(b) One Councilor of the Association to be appointed by the President

(c) One general practitioner to be appointed by the President

(d) One specialist to be appointed by the President

(e) The Treasurer of Indiana State Medical Association

(f) The Dean of Indiana University School of Medicine

(g) One of the attorneys of Indiana State Medical Association to be appointed by the President

Sec. 2.—This committee shall have authority to make loans to medical students in accordance with the terms and conditions under which funds are made available for that purpose. The committee shall organize itself at its first meeting following the Annual Convention of the Association, by the election of a chairman and a secretary. The committee shall adopt its own rules and regulations, subject to the approval of the Council. The secretary shall have the duty and responsibility of keeping minutes of all transactions of the committee, and shall file a copy of such minutes, as well as a copy of all papers pertaining to any application or loans, in the Headquarters Office of the Association.

CHAPTER XIII.—THE MEDICAL-LEGAL REVIEW COMMITTEE

Section 1.—The Medical-Legal Review Committee shall consist of three members whose duty it shall be to meet in joint session and work with a similar committee to be appointed by the President of the State Bar Association. This committee of the Medical Association shall function as the medical representatives provided for in the Joint Inter-Professional Code of the State Medical Association and the State Bar Association to carry out the purposes of that Code. Its duties shall be as stated in that Code in the form in effect from time to time as approved by the Association.

CHAPTER XIV.—THE FUTURE PLANNING COMMITTEE

Section 1.—The Future Planning Committee shall consist of nine members to be appointed by the President for terms of three years. Terms shall be staggered so that three members' terms expire each year; at the first, three members shall be appointed for one year, three for two years and three for three years. Thereafter all appointments shall be for a period of three years. The President, President-elect, Chairman of the Council, Chairman of the Executive Committee and Editor of THE JOURNAL shall be ex-officio members. The membership should be varied, according to experience, age, size of local county medical society and geographical area. At least one-third to one-half should be in the age group who would be in practice in the future contemplated, that is ten to twenty years distant.

Sec. 2.—The function of this committee shall be to study and anticipate future trends and to stimu-

late the various commissions in coordinated directions so there is concord to the entire operation of Indiana State Medical Association. It is not contemplated that it be an operational committee.

CHAPTER XV.—THE COMMISSION ON CONSTITUTION AND BYLAWS

Section 1.—The Commission on Constitution and Bylaws shall keep in contact with the developments and changes in procedures in carrying on the work of this Association; shall suggest revisions necessary to keep the Constitution and Bylaws always in accord with the practices and procedures best adapted to the functioning of the Association; and shall keep the practices and procedures of the Association consistent with the provisions from time to time contained in the Constitution and Bylaws—to the end that all members of the profession, by reference to the Constitution and Bylaws, may be able to obtain accurate information regarding procedure and practice within the Association, and that hampering of such procedure and practice by obsolete provisions in the Constitution and Bylaws may be avoided.

CHAPTER XVI.—THE COMMISSION ON LEGISLATION

Section 1.—The Commission on Legislation shall study all legislation, both state and national, and all local legislative trends and movements, as to their effect upon the practice of medicine and the protection of the public health; shall keep the profession informed at all times concerning the matters within its area of responsibility; shall conduct investigations of legislative proposals; and shall maintain liaison with members of the State Legislature and of the United States Congress, and with the legislative activities of the American Medical Association. It shall strive to implement and make effective the legislative proposals adopted by the Association.

CHAPTER XVII.—THE COMMISSION ON PUBLIC INFORMATION

Section 1.—The Commission on Public Information shall collect and organize for dissemination to the public all matters of public interest within the field of medicine, including the activities of other commissions in which the public interest would be involved, and including also the achievements in the advancement of medicine which would be of interest to the public; shall disseminate all such information through the use of whatever media the Commission may find adaptable to that purpose so that such information may be brought to the public in the most effective and convincing manner; and shall develop and maintain the relations of the medical profession with the public in such a way as to give the lay public a better knowledge and understanding of the aims, objects and value of the profession to the public.

CHAPTER XVIII.—THE COMMISSION ON GOVERNMENTAL MEDICAL SERVICES

Section 1.—The Commission on Governmental Medical Services shall concern itself and assume special responsibility in obtaining information and giving counsel and advice to the Association with respect to all matters in which medical service comes into contact with any existing or proposed functions of government, including civil defense, rehabilitation of persons handicapped by abnormality or disease, medical service in welfare departments, maternal and child health programs sponsored through governmental agencies, medical care of military manpower, plans and programs for medical care of veterans, medical care for dependents of those in uniformed services of the Government, plans and programs of the Government for medical care now existing or which may hereafter be adopted by any special group, government programs for elimination of venereal disease and other communicable diseases, and all programs and plans for medical care to be provided through municipal, state or federal governments.

CHAPTER XIX.—THE COMMISSION ON PUBLIC HEALTH

Section 1.—The Commission on Public Health shall assemble and study information regarding industrial medical practice, rural health, preventive medicine, placement of physicians, traffic safety, conservation of hearing and vision; and shall bring such information, and the possibility of progress and advancement in such fields, to the attention of the medical profession, with suggestions for improvements as the commission finds such possibilities.

CHAPTER XX.—THE COMMISSION ON VOLUNTARY HEALTH AGENCIES

Section 1.—The Commission on Voluntary Health Agencies shall maintain liaison between all voluntary health agencies and the Association; shall study and counsel in regard to planning all educational and other activities of such agencies; and shall keep the Association fully informed at all times regarding present and contemplated programs of these agencies.

CHAPTER XXI.—THE COMMISSION ON MEDICAL ECONOMICS AND INSURANCE

Section 1.—The Commission on Medical Economics and Insurance shall study and improve forms used in medical and hospital insurance; shall continuously be interested in all types of plans for prepayment of medical and hospital expense, and for provision for medical and hospital service through all types of group activity; shall maintain liaison with labor with respect to labor's problems involving medical and hospital care, and Workmen's Compensation problems; and shall seek improved solutions of professional liability or malpractice problems, tax problems in relation to medical practice, and problems involving physician retirement plans.

CHAPTER XXII.—THE COMMISSION ON INTER-PROFESSIONAL RELATIONS

Section 1.—The Commission on Inter-Professional Relations shall study to find all the best methods

of maintaining on the highest and most satisfactory levels physicians' professional relations with hospitals, nurses, dentists, pharmacists, pharmaceutical manufacturers, veterinarians, nursing homes, and all other professional groups with which the practice of medicine comes into contact.

CHAPTER XXIII.—THE COMMISSION ON MEDICAL EDUCATION AND LICENSURE

Section 1.—The Commission on Medical Education and Licensure shall maintain liaison with, and try to be of assistance to, medical schools and the licensing board; and shall keep in contact with, and endeavor to assist in improving, undergraduate education, postgraduate education, intern training, resident training, preceptor instruction, and public school health education.

CHAPTER XXIV.—THE COMMISSION ON SPECIAL ACTIVITIES

Section 1.—The Commission on Special Activities shall organize and promote support for the American Medical Education Fund, assistance to physicians, blood banks, and all miscellaneous activities not falling within the area of responsibilities of other commissions or committees.

CHAPTER XXV.—THE COMMISSION ON THE AGED AND AGING

Section 1.—The duties of this Commission shall be to study, investigate, and make recommendations to the Association in the areas falling within the question of the aged and aging, including medical care programs, medical care insurance, rehabilitation, and preventive medicine.

CHAPTER XXVI.—REFERENCE COMMITTEES

Section 1.—Immediately after the organization of the House of Delegates at each Annual Convention, the President shall announce the membership of the reference committees to serve during the convention for which they are appointed. Appointments to these reference committees shall be made by the President in time for them to be published in THE JOURNAL and the Handbook prior to such Annual Convention.

The President shall have the power to appoint substitutes from among the members present for absent appointees.

Each committee shall consist of five members, at least three of whom shall be members of the House of Delegates. The chairman shall be named by the President from among those who are members of the House of Delegates. To these committees shall be referred all reports, resolutions, measures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

Sec. 2.—The following Reference Committees are hereby constituted to which shall be referred all matters as indicated by the titles of the committees:

(1) Sections and Section Work
(2) Rules and Order of Business
(3) Medical Education and Hospitals
(4) Legislation
(5) Public Relations
(6) Hygiene and Public Health
(7) Amendments to the Constitution and Bylaws
(8) Reports of Officers
(9) Credentials
(10) Insurance
(11) Miscellaneous Business

Where a report, resolution, measure, or proposition deals with more than one subject matter, reference thereof may, in the discretion of the President, be made (a) to as many Reference Committees as are necessary to cover all subjects included therein; or (b) to only one Reference Committee which the President deems has within the scope of its reference the most important part of the matter referred.

No report of any Reference Committee shall be rejected on the ground that it covers something not included in the matters which such Committee was created to consider.

Sec. 3.—The time and place of meetings of all reference committees shall be publicly posted, and all meetings of all reference committees shall be open to all members of the Association.

Officers and chairmen of all committees whose reports are referred to reference committees shall have the right to appear and be heard before the respective committees to which such references are made, in regard to their reports.

CHAPTER XXVII—COUNTY SOCIETIES

Section 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and Bylaws, shall, on application receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of said component society to conduct itself in harmony with the letter and spirit of this Constitution and Bylaws and other rules and resolutions of this Association.

Sec. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and Bylaws.

Sec. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 4.—Each county society shall be judge of

the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who holds a degree of Doctor of Medicine or a degree of Bachelor of Medicine, and who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be eligible for membership. Provided, however, that each county society may deny membership in such society for infraction or violation of any law relating to the practice of medicine or of the Constitution and Bylaws of such society, the Constitution and Bylaws of the Indiana State Medical Association or for a violation of the Principles of Medical Ethics of the Indiana State Medical Association; and may, after due notice and hearing, censor, suspend or expel any member for any such infraction. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

Sec. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 7.—When a member in good standing in a component society moves to another county in this state, his name shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, provided the transfer is approved by majority vote of the membership of said society to which the transfer is proposed.

Sec. 8.—A physician who has the major part of his practice in a county other than the county in which he resides may hold his membership in the county society of his residence or in the county society of the county in which he has the major part of his practice. However, no physician shall hold active membership in more than one county society at the same time.

Sec. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and professional status of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

Sec. 10.—At the annual business meeting for election of other officers, in advance of the Annual Convention of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before February first.

Sec. 11.—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

The secretary of each component society shall prepare and send to the Councilor of his district a quarterly report briefly stating the activities of his county society including meetings, programs, changes in officers and personnel of membership. A copy of this quarterly report to the Councilor shall also be sent to the Executive Secretary of the State Association. The State Association shall supply each county secretary a form for these reports.

Sec. 12.—The fiscal year of the Association shall be from October 1 to September 30 of the succeeding year. The dues shall be collected by the calendar year and payable in advance.

The secretary of each component society shall forward the dues for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the dues for such new members.

The dues shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the dues to the close of the year only. Provided, however, that physicians elected to their first membership in this Association during the first nine months of any year shall pay the regular annual dues for that year; and those elected to their first membership after October 1 of any one year shall pay fifty percent of the annual dues as dues for the remainder of that year. Interns and residents shall pay $15.00 a year annual dues during their term of service in the hospital.

In the event the county society remits a member's dues on account of financial hardship, the secretary of the county medical society shall recommend in writing to the councilor of his district the remission of the state association dues of said member of the society, showing why such recommendation should be granted. The councilor in turn shall present the recommendation to the Council, which shall have the power to remit such dues.

Sec. 13.—Any county society which fails to pay its dues or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or

proceedings of the Association or of the House of Delegates until such requirements have been met.

Sec. 14.—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues to the Association.

Sec. 15.—Each component society shall have its own Constitution and Bylaws, which shall not be in conflict with the Constitution and Bylaws either of this Association or of the American Medical Association. An up-to-date copy thereof shall be filed with the Executive Secretary of the Indiana State Medical Association not later than May 1 of each calendar year, or where such copy is so on file and no change has been made, then it shall be sufficient to file a certificate to that effect with said Executive Secretary.

CHAPTER XXVIII.—COUNCILOR DISTRICT MEDICAL SOCIETIES

Section 1.—A Councilor District Medical Society, hereinafter called the District Society, shall be a society whose members consist of the members of the County Medical Societies in the Counties which constitute the Councilor District.

Sec. 2.—The State shall be divided into thirteen (13) Councilor Districts with the boundary lines and numbers of each District to be as follows:

First District—Posey, Vanderburgh, Warrick, Spencer, Perry, Pike and Gibson Counties.

Second District—Knox, Daviess, Martin, Monroe, Owen, Greene and Sullivan Counties.

Third District—Dubois, Crawford, Harrison, Floyd, Clark, Scott, Washington, Orange and Lawrence Counties.

Fourth District—Jackson, Jennings, Jefferson, Switzerland, Ohio, Dearborn, Ripley, Decatur, Bartholomew and Brown Counties.

Fifth District—Clay, Vigo, Vermillion, Parke and Putnam Counties.

Sixth District—Shelby, Rush, Fayette, Franklin, Union, Wayne, Henry and Hancock Counties.

Seventh District—Morgan, Johnson, Marion and Hendricks Counties.

Eighth District—Madison, Delaware, Randolph, Jay and Blackford Counties.

Ninth District—Fountain, Montgomery, Boone, Hamilton, Tipton, Clinton, Tippecanoe, Warren, Benton, White and Newton Counties.

Tenth District—Jasper, Porter and Lake Counties.

Eleventh District—Carroll, Howard, Grant, Huntington, Wabash, Miami and Cass Counties.

Twelfth District—Wells, Adams, Whitley, Allen, Noble, DeKalb, LaGrange and Steuben Counties.

Thirteenth District—Pulaski, Fulton, Kosciusko, Marshall, Starke, LaPorte, St. Joseph and Elkhart Counties.

Sec. 3.—Each District Society shall adopt a Constitution and Bylaws, which shall not conflict with the Constitution and Bylaws of the State Association, and only one District Society shall exist within any one Councilor District. The authorized District Society in each Councilor District shall receive a charter from the State Association, and the Secretary of the District Society shall have custody of the charter.

Sec. 4.—Each District Society shall organize by electing a President, a Secretary, and a Treasurer and a Councilor and Alternate Councilor as the current Councilor term and Alternate Councilor term for the district expires, and such others as may be provided for in its Constitution and Bylaws. The office of Secretary and Treasurer may be held by the same physician. The Councilor shall continue to have the same duties and terms as are set forth in the Constitution and Bylaws of this Association.

Sec. 5.—The dues of the District Society, in an amount fixed by the District Society to meet the District Society needs, shall be collected by the Secretaries of the component County Societies and delivered to the Treasurer of the District Society. The Secretary of each District Society shall report to the office of the State Association the names and addresses of the members of his District Society, together with a copy of the minutes of each meeting of the District Society.

Sec. 6.—Each District Society shall meet at least once each year at a time and place to be fixed by the District Society. On or before January 1st of each year each District Society shall notify the headquarters of the State Association of the time and place of the annual District meeting for that year; but if no such notification has been received in the headquarters on or before the January meeting of the Council, the Councilor shall fix the time and place of the District meeting, and notice of such meeting shall be sent to the members of the County Medical Societies in such District.

Sec. 7.—Whenever a District Society is to elect a Councilor and/or Alternate, the headquarters office of the State Association shall so notify the individual members of such District Society not later than the first of March of the year in which the election is to occur.

Sec. 8.—The District Society shall send to the headquarters office of the State Association a copy of its program showing the time and place of its meetings, early enough that the headquarters office may notify all members within the District of the meeting at least thirty (30) days prior to the date thereof.

CHAPTER XXIX.—MISCELLANEOUS

Section 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and Bylaws.

Sec. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XXX.—MEDICAL DEFENSE

Section 1.—One dollar and twenty-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

Sec. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Medical Defense Committee of the Association.

Sec. 3.—This Committee shall have full authority governing all matters pertaining to this Chapter. In order to secure to any physician sued or against whom claim is made a fair and full presentation of his defense, the Committee shall have power to enter into an agreement with such physician to furnish to him funds with which to employ and pay one attorney of his choice and such other expenses as the Committee may approve as necessary to a fair and full presentation of his defense. Provided, always, that the attorney selected by the physician must be of good reputation and standing in his profession and the terms of employment, including the fees to be paid, must be approved by the Committee in each case in advance of such agreement. Provided, further, that the Executive Committee shall set a limit to the amount which may be so expended in connection with any one claim or case.

Sec. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the defense fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. Payments out of this fund shall be made only upon approval of the Executive Committee, by checks signed by the Treasurer and the Chairman of the Council.

Sec. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published.

Sec. 6.—This Association shall not be liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these Bylaws.

Sec. 7.—The Association shall not undertake the defense of a member in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. Dues are payable on January 1, and become delinquent on February 1 of each year. The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered.

Sec. 8.—A member desiring to avail himself of the services of the Medical Defense Committee in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

Sec. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Medical Defense Committee of this Association.

Sec. 10.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Medical Defense Committee of this Association, whose decision shall be final.

Sec. 11.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

Sec. 12.—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

Sec. 13.—The Medical Defense Committee shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

Sec. 14.—Medical defense as provided for by this Association shall be available to members under the terms stated in these Bylaws only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

CHAPTER XXXI.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XXXII.—INVESTMENT OF SURPLUS FUNDS

Section 1.—The investment of all surplus funds of this Association shall be under the direct control and management of the Executive Committee subject to instructions in regard thereto which may be given by the Council at its option. The Executive Committee shall have the right and is encouraged to obtain the advice and counsel of the investment departments of any bank or trust company of Indianapolis in regard to the discharge of the duties covered by this chapter of the Bylaws.

CHAPTER XXXIII.—AMENDMENTS

Section 1.—These Bylaws may be amended at any Annual Convention by a majority vote of all the delegates present at that convention, after the amendment has lain on the table for one day.

Sec. 2.—Upon the adoption of this Constitution and Bylaws all previous Constitutions and Bylaws are hereby repealed.

Principles of Medical Ethics of the American Medical Association

"PREAMBLE"

"These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduuct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

"Section 1.—The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

"Section 2.—Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

"Section 3.—A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

"Section 4.—The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

"Section 5.—A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

"Section 6.—A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

"Section 7.—In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.

"Section 8.—A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

"Section 9.—A physician may not reveal the confidencies entrusted to him in the sourse of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

"Section 10—The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community."



Your Contributions Are Needed . . .

SUPPORT THESE PROGRAMS OF THE AMA-ERF

- *Funds for Medical Schools* -- Contributions may be designated for one particular school. Undesignated contributions will be distributed equally among all medical schools. No restrictions are placed on the use made of this money by the schools.
- *Loan Guarantee Fund* -- Provides guaranteed loans to medical students, interns and residents. For every dollar in the fund, the private banking industry loans $12.50, at a maximum rate of 6% simple interest.
- *Honors and Scholarship Program* -- Designed to attract students of high promise to careers in medicine—meetings, personal contacts and written materials will be employed. Medical school scholarships will be available to those who need them.
- *Undesignated Contributions* -- Money not designated for any specific AMA-ERF program will be placed in the general fund and the Board of Directors will decide on its use, depending upon need.

AMA-ERF

American Medical Association
Education and Research Foundation
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COMMERCIAL ANNOUNCEMENTS

BUY AND TRY: Wye Plantation Aberdeen-Angus frozen semen from Advonced Register P.R.I. sires officially gaining over four pounds per day or whose 365-day weights ore above 1,200 pounds. (Performance tested sires always for sale.) WYE PLANTATION, Queenstown, Maryland 21653. Telephones: 301-827-7166 or 301-827-7160.

PHYSICIAN WANTED: Internist, Board eligible or certified, for group proctice. Sub-specialty not necessary but acceptable. Write Box 338, The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Indiana 46203.

AVAILABLE: Equipped physicion's office available immediotely due to death. Community of 2,600; drawing area of 8,000. Practice active 20 years. New location two yeors ago. Contact Robert A. Cox, D.D.S., 3 Porkview Court, Combridge City, Ind. Phone 35191 for details.

FOR SALE: Haynes manual hydraulic rectal and gynecological examining table. Also two Allison "Monarch" walnut treatment cabinets. Call 283-2884, Indianapolis, after 6 p.m.

WANTED: G. P. to join doctor in olready established practice and increasingly growing one. New and modern office located in West Lofayette, Ind. Two hospitals for services. Write Box 341, The Journal, ISMA, 3935 N. Meridian St., Indianapolis, Ind. 46208.

DESIRED: Associate in practice, to become a partner in an established practice—surgery general ond surgery of trauma, and industrial practice. Long established with all necessary equipment in o new office in a new building and a busy growing community. Prefer a man whc has completed active duty requirements in service; would feel Naval Reservist would be an extra, but not essential, qualification. If you hove the qualifications and are interested, write Box 339, The Journal, ISMA, 3935 N. Meridian St., Indianapolis, Ind. 46208.

GENERAL PRACTICE, including patients, in medical building. Fully furnished and equipped suite; all services furnished; laboratory next door; hospitals close. Doctor urgently needed in oreo. All of the above at NO COST to qualified doctor. Inquire R. C. Corson, 555 W. 92nd St., Indionapolis. Phone 846-8524.

EASTERN WISCONSIN CLINIC in rapidly growing community of 50,000 desires board-eligible or certified physicians in obstetrics and gynecology, pediotrics, orthopedic surgery, urology and otolaryngology. Well-equipped clinic and ex cellent hospital facilities. Lake shore location offers ample recreational focilities. Attractive financial plan leading to early full partnership. Full expenses paid for applicants invited to interview. Call or write: F. L. Hildebrand, M.D., Riverside Clinic, Menasha, Wisconsin.

AVAILABLE: Office location for general practitioner or pediatrician. Attractive rental proposition. Located ten minutes from hospital in fastest growing township in Indiana. Contact R. A. Chronister, % Chronister Pharmacy, 6120 Stellhorn Rd., Fort Wayne, Ind. Telephone 219-483-9561.

FOR SALE: General practice netting $40,000 a year offered at $17,000 or to Locum Tenens at net income of $35,000 per year. Included is modern air-conditioned building, completely equipped. Excellent clientele in pleasant central Ohio community of 6,000 with hospital. Doctor leaving to take residency. Available July, 1967. Call Robert E. Goyne, M.D., Upper Sandusky, Ohio, (419) 294-1215.

CLINICAL DIRECTOR: In accredited, progressive 2,600-bed mental hospital with fully approved residency training program. Ideal living in active community in the heart of Michigan's Water Winter Wonderland vacation area. Requires Psychiatric Board Certification. Salary: $20,984 to $25,391. Furnished housing available, unparalleled fringe benefits. Contact M. Duane Sommerness, M.D., Supt., Traverse City State Hospital, Traverse City, Mich. 49684.

FOR SALE: Good general practice in growing southern Indiana community; $32,000 net last year. Will sacrifice. Available immediately. Write Box 342, The Journal, ISMA, 3935 N. Meridian St., Indianapolis, Ind. 46208.

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Roster: $3.00 each.

Yearbook: $5.00 each

NOTICE

Commercial announcements are carried in the Journal as a special service to ISMA members. Only advertisements considered to be of advantage to members by the Journal editorial board will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

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Wawasee Apartments 857
Wyeth Laboratories 790-91

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